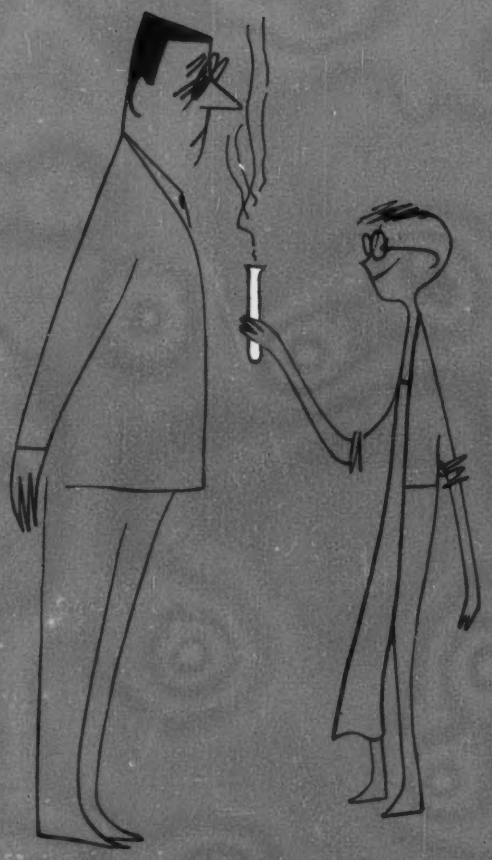
THE NATION'S SCHOOLS



MARCH

A.A.S.A. convention digest
A pattern for integration
Purple Heart for administrators
Making friends with the press
Are your board's actions legal?
A survey of school surveys
Expressive school architecture
Influence of superintendent's wife

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION



CONTROL IS NO ACCIDENT

A knuckle ball is one of the controls an experienced pitcher uses to keep the game going his way . . . To keep business coming *your* way, why not use the controls Gumpert's 64-year experience brings you?

Quality control, for instance, is assured by Gumpert's consistent use of superior ingredients and standardized scientific formulas—a combination which guarantees you uniformity and the same fine quality every time you use Gumpert's Food Specialties.

Other controls that Gumpert provides are portion and cost control and the elimination of waste—all vital to success. Next time your Gumpert Representative calls, ask him to show you in dollars and cents how profitable *Going Gumpert* can be.

BE MODERN—GO GUMPERT

GUMPERT

FIRST NAME IN FINE FOOD SPECIALTIES

300 TESTED PRODUCTS THAT MAKE FOOD SELL

S. GUMPERT CO., INC., JERSEY CITY 2, NEW JERSEY • CHICAGO • SAN FRANCISCO • HOUSTON

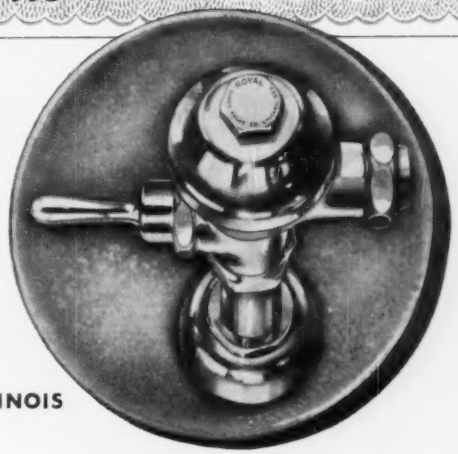


1906 # SLOAN 1956

Flush Valve Leadership for 50 Years

¶ The achievement of Sloan leadership has been the reward for a revolutionary flush valve design of ingenious simplicity, *plus* never faltering application of advanced engineering skill, constant vigilance over fine workmanship, and unceasing research for improvement. ¶ Fifty years ago, when the first Sloan Flush Valve was produced, a few others were already on the market but none had won general acceptance. Sloan's early progress was slow and steady until a basic fact became widely known and its significance clearly understood: **The SLOAN ROYAL FLUSH VALVE never needs adjustment—there's nothing to adjust.** ¶ Soon the enthusiastic praise of users spread throughout the nation and then to other countries. Today there are installations in every civilized country, in every kind of building, and on ships that travel the water highways of the world. ¶ Since the beginning of its climb to leadership Sloan has developed a complete line of dependable flush valves to meet every practical purpose and price requirement. Upon this firm foundation we proudly celebrate our 50th Anniversary.

SLOAN *Flush* VALVES



Another Sloan achievement in greater user satisfaction is the Act-O-Matic Shower Head, which provides a refreshing cone-within-cone spray and is automatically self-cleaning each time it is used. It does not clog—does not drip—does not waste water and fuel. Its exclusive advantages are duplicating the enthusiastic praise that brought fame to Sloan Flush Valves.

SLOAN VALVE COMPANY • CHICAGO • ILLINOIS

here's the *solution* to "AFTER-HOURS" heating problems...



Johnson *Dual* Thermostats may be grouped by area, as shown on this typical plan. Any or all areas may be switched to low, economy "after-hours" temperatures, while only those rooms that are in use continue at normal comfort levels.



How are you handling the "after-hours" heating problem created by extra-curricular student activities and neighborhood group meetings in your school? Heating an entire building when it is only partly occupied wastes tremendous amounts of fuel *that you could just as well be saving!*

The answer is a modern *Dual* System of Johnson Automatic Temperature Control. Briefly, here's how it works:

During regular school hours, a Johnson *Dual* Thermostat in each room automatically maintains every space at the ideal comfort level. When classes are over, each group of *Dual* Thermostats in the building may be reset, from a central control panel, to operate at *reduced, non-occupancy temperatures.*

In those rooms which continue in use, merely pressing the button on the *Dual* Thermostat restores them to normal occupancy temperatures, *without changing the economy settings of the other thermostats.* Think of the fuel savings!

Johnson *Dual* Control offers the finest in modern room-by-room temperature regulation—and at the lowest possible operating cost. Heating only the occupied rooms quickly saves enough fuel dollars to pay for the cost of the entire system!

But that's only part of the story. Whether you are planning a new school or modernizing an existing one, have an engineer from a nearby Johnson branch explain, without obligation, how these and other money-saving advantages of *Dual* Control can be applied to your problems.

JOHNSON CONTROL

TEMPERATURE ↕ AIR CONDITIONING

PLANNING • MANUFACTURING • INSTALLING • SINCE 1885

JOHNSON SERVICE COMPANY
507-L East Michigan St., Milwaukee 1, Wisconsin

Please send me your new folder, "How Johnson Dual Control Solves the After-Hours Heating Problem in Schools."

NAME _____

SCHOOL _____

ADDRESS _____

CITY & STATE _____

VOLUME 57, NO. 3

Editorial Director
R. M. CUNNINGHAM Jr.

Editor
ARTHUR H. RICE

Assistant Editors
MILDRED WHITCOMB
MARY TOMANCIK
DOLORES HENNING

Editorial Assistant
JEAN VON CHRISTIERSON

Art Director
EWALD L. WEBER

Publisher
RAYMOND P. SLOAN

Associate Publisher
STANLEY R. CLAGUE

Advertising Director
J. W. CANNON Jr.

Editorial and Publishing Offices
919 N. MICHIGAN AVE.
CHICAGO 11, ILL.

Eastern Office
101 PARK AVE.
NEW YORK 17, N.Y.

Cleveland Advertising Office
19030 WESTLAKE ROAD
CLEVELAND 16, OHIO

Western States Advertising Representative
McDONALD-THOMPSON
LOS ANGELES, SAN FRANCISCO
DALLAS, SEATTLE, HOUSTON
DENVER



Published monthly and copyright © 1956 by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago 11, Ill., U.S.A. Raymond P. Sloan, president; Stanley R. Clague, vice president and secretary; Everett W. Jones, vice president; Peter Ball, vice president; John P. McDermott, treasurer. Subscriptions, 1 year, $4; 2 years, $6. Outside U.S., U.S.P., Canada, 1 year, $6; 2 years, $10. Current copies, 50c each. Member, Audit Bureau of Circulations; Magazine Publishers' Association; Educational Press Association of America; Microfilms, University Microfilms, 313 N. First St., Ann Arbor, Mich. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Published on the 20th of the month preceding the date of issue. Allow 30 days in advance of publication date for change of address.

THE NATION'S SCHOOLS

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

MARCH 1956

ARTICLES

A Pattern of Integration 43
An Interview With ROBERT D. MORROW, HAROLD L. GEAR, and LOREN VAUGHN, JR.

Making—and Keeping—Friends With the Press 47
JOHN P. MILLIGAN

Lift Up Your Purple Heart 49
JAMES M. SPINNING

It's Cheaper to Centralize Services 53
THOMAS A. LINTON

The Superintendent's Wife 56
VERGIL K. ORT

Feelings Are Facts in School District Reorganization 58
ROALD F. CAMPBELL

Board Action Isn't Legal—If Procedures Are Faulty 61
LEE O. GARBER

Chalk Dust 64
FREDERICK JAMES MOFFITT

A Survey of Surveys 91
M. R. SUMPTION

A Tale of Five Cities 116
Book Review by WILLIAM J. SANDERS

One-Volume Library of School Law 120
Book Review by LEE O. GARBER

Layman's Views Well Intentioned 124
Book Review by A.H.R.

CONVENTION DIGEST

Five Days With the A.A.S.A. 65

A.E.R.A. Goes International This Year 76

Sitting In on the School Boards Meeting 78

SCHOOLHOUSE PLANNING

Toward an Expressive School Architecture 81
ARCHIBALD COLEMAN ROGERS

Federal Aid for School Construction 85
OPINION POLL

How to Read Blueprints—III 86
C. P. ATKINS and J. P. GRAHAM

AUDIO-VISUAL

Everyday Classroom Use of Teaching Aids 94
C. J. McCARTNEY

THE SCHOOL LUNCH

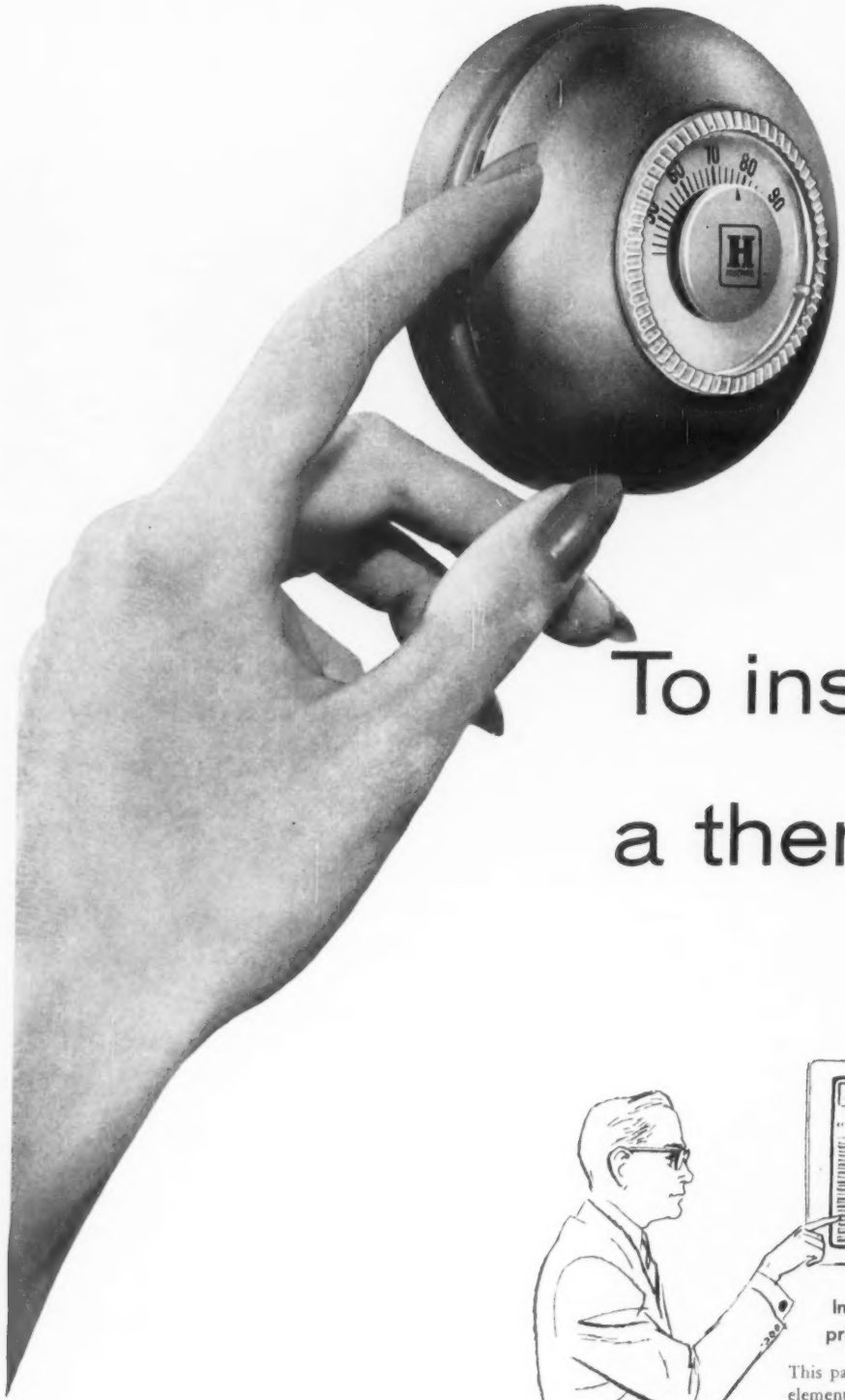
Rural Areas Need School Lunch Programs, Too 100
MARION G. JOSEPHI, M.D., and HENRIK L. BLUM, M.D.

MAINTENANCE AND OPERATION

Expanded Services to Business Officials 110
A Visit With CHARLES W. FOSTER

REGULAR FEATURES

Among the Authors 4
Administrator's Clinic 6
Reader Opinion 8
Roving Reporter 12
Looking Forward 41
Wire From Washington 80
News in Review 134
About People 164
The Bookshelf 172
Coming Events 176
What's New for Schools 185
Index of Advertisers ..... op. 228



Pneumatic Round Thermostat. One in each classroom makes it possible to adjust temperature to meet varied activities of children.

To insure the

a thermostat

Indicator panel gives the principal a fingertip report

This panel is wired to a special sensing element in each room thermostat. It provides the principal with a push-button temperature reading for any room in the school—as well as an auxiliary fire detection system.



Wall thermostat in each room prevents stuffiness that makes students sleepy when blinds are drawn for audio-visual instruction. This results in increased alertness and receptiveness.



Wall thermostat in each room maintains right temperature for all types of classroom activities. Temperature may be lowered during exercise period, raised again for quiet study hour.

right "climate for learning"– in each classroom

Honeywell's new Schoolmaster system increases the child's "take home learning."

EFFECTIVE teaching calls for proper temperature and ventilation. Anyone who's ever tried to teach sluggish students in a stuffy classroom knows how important those factors are. But how can you control these conditions?

The best way is with mechanical ventilation and a thermostat on the wall of each room. Such "climate conditioning" is the idea behind the Honeywell Schoolmaster Temperature Control System. Individual room thermostats allow the teacher to maintain the right conditions for classroom alertness—at all times of the day regardless of instruction methods.

In addition, the Schoolmaster System includes an indicator panel for the principal's office which gives a fingertip report on all room temperatures.

The Schoolmaster is an exclusive Honeywell development, designed for any school—new or old. No major building alterations are necessary, as the wiring is simple.

For complete information, call your local Honeywell office, or write to Honeywell, Dept. NS-3-08, Minneapolis 8, Minnesota.

MINNEAPOLIS **Honeywell**

112 OFFICES ACROSS THE NATION

H HONEYWELL School Temperature Controls

AMONG THE AUTHORS



Roald Campbell

If your plan for consolidating some school districts has just failed again, better look at ROALD CAMPBELL's article (*p.* 58). Dr. Campbell is professor of education at Ohio State University. Formerly he was professor of elementary education and educational administration at the University of Utah. He is co-author of "The Administration of Public Education," published in 1952, and of "The Dynamics of School-Community Relationships," published in 1955. Also he is co-editor of a proposed publication of the National Conference of Professors of Educational Administration, tentatively titled "Administrative Behavior in Education."

JAMES M. SPINNING once described himself as "either one of the more durable or less sensitive of city school superintendents. At least, of all the superintendents in cities of over 200,000 I have stood longest in one place." Mr. Spinning retired as superintendent at Rochester, N.Y., in 1954, after almost 21 years there, but he's still willing to share his secrets of durability with other administrators (*p.* 49). A word of warning: His chief complaint is being taken too seriously at the wrong time and vice versa.

Three administrators report on page 43 their experiences with desegregation in the schools of Tucson and Phoenix, Ariz. ROBERT D. MORROW has been superintendent at Tucson since 1941. Previously he was a field agent for the Missouri School for the Deaf, teacher and then supervisor at the Iowa School for the Deaf, and superintendent of the Arizona State School for the Deaf and Blind. Extremely active in civic affairs, Mr. Morrow has been or is connected with the Red Cross, the Y.M.C.A., the Community Chest, the Boy Scouts, the Arizona Children's Colony, the Tucson Child Guidance Clinic, the Tucson Family Service Agency, the state and local Council on Civic Unity, and the Tucson



Robert D. Morrow



Harold L. Gear



Loren Vaughn Jr.

Symphony Orchestra. . . . HAROLD L. GEAR has been superintendent of the Phoenix union high schools and college system since 1953. Previously he was a teacher at Kent, Ohio, and Brookline, Mass.; high school principal at Steubenville, Ohio, and Phoenix, and assistant superintendent at Phoenix. . . . LOREN VAUGHN Jr. has been superintendent of Phoenix Elementary School District No. 1 since 1950. Before that he was a teacher, principal and superintendent in various Arizona towns, served in the army (rising from a second lieutenant to lieutenant colonel), director of research for the state department of education in Arizona, and elementary school principal at Redlands, Calif. His present office is on the site of the old Lincoln School, where he enrolled in the first grade in 1913.



A. C. Rogers

A school architect who pleads for more expressive school architecture (*p.* 81) is ARCHIBALD COLEMAN ROGERS. Mr. Rogers is a member of the firm of Rogers and Taliaferro, Annapolis, Md. He received his bachelor of architecture degree from Princeton University in 1939 and his master's degree in 1942. He started his architectural practice in 1946 following a tour of duty as a lieutenant in the navy during World War II. Mr. Rogers is a member of the American Institute of Architects and the American Institute of Planners. During the past year he has served as executive director of the Greater Baltimore Committee, which is engaged in a vast civic improvement and urban renewal program.



Merle R. Sumption

MERLE R. SUMPTION passed the century mark in August 1955 — not in age but in the number of school surveys completed since he became director of the office of field services at the University of Illinois. Now, says Dr. Sumption, he and his staff are well started on their second hundred. On page 91 of this issue he reports on a survey of surveys. Before going to Illinois Dr. Sumption was director of personnel for the St. Louis public schools. His book, "How to Conduct a Citizens School Survey," was published in 1952.

A former student of Frank E. Spaulding reviews, on page 116, Dr. Spaulding's autobiography. WILLIAM J. SANDERS, who studied under the veteran educator at Yale, is now superintendent at Springfield, Mass. Dr. Sanders formerly was a teacher at New Haven, Conn., a member of the faculties of De Paul University and New Haven State Teachers College, and president of the state teachers college at Fitchburg, Mass.



Take a tip from the guy who knows:

FOR SCHOOL FLOORS THAT ABSORB ABUSE, *Specify* KREOLITE!

More and more architects, school boards and school executives are specifying Kreolite Flexible Strip End Grain Wood Block Flooring for school activity centers where floors really take a beating.

For only Kreolite combines the beauty of natural finish woods with the rugged durability of end grain construction to provide flooring that withstands the constant abuse common to school gymnasiums and vocational shops.

Resilient Kreolite is economical to install, easy to maintain.

You, too, can realize the benefits from this remarkable flooring material. Just fill out the coupon below.

KREOLITE FLEXIBLE STRIP END GRAIN WOOD BLOCK FLOORS

The Jennison-Wright Corp.

2463 Broadway Toledo 9, Ohio

Please send me a free sample and complete specifications of Kreolite Flexible Strip End Grain Wood Block Flooring.

Name_____

Address_____

City_____ State_____

N

THE ADMINISTRATOR'S Clinic

New suggestion on year-round schools . . . C.P.E.A. centers report . . . C.I.O. views on integration . . . New best seller

By CALVIN GRIEDER, professor of school administration, University of Colorado

Ponderous inertia. Last September The NATION'S SCHOOLS published Vernon D. MacPherson's summary of an exhaustive Los Angeles study of the all-year school. I have had copies made of the most important parts and will send single copies to readers who request them or reprints of the article may be obtained from the magazine.

The all-year school is going to be an agitated topic for a long time. It makes swell copy for popular magazines and Sunday supplements, even though nobody's been able to figure out a practical schedule for teachers, pupils, administrators and parents. I think a much better idea is the revamping of the school year to provide for four terms, with two vacation periods of from four to six weeks instead of one long summer vacation of from 10 to 12 weeks. How about this arrangement for 1956, which provides for 190 days?

First term (44 days).....January 30 to March 29.

Second term (54 days).....April 10 to June 22.

Third term (44 days excluding Labor Day).....August 6 to October 5.

Fourth term (48 days excluding two days for Thanksgiving).....October 15 to December 21.

There are many advantages in such a scheme, especially that the shorter terms and shorter, more frequent vacations would be better for most pupils. For most pupils the long summer holiday we have now is too long. On the other hand, the long spell of school from Christmas to June gets to be quite wearisome for pupils and teachers alike, even if a few days' break is allowed at Easter.

The criticism that schoolhouses are closed from two to three full months every summer would probably be allayed. Maintenance work could be better distributed through the year, relieving peak loads, and fuel would be saved in northern climes if schools were closed for several weeks in midwinter. Leaves of absence for teachers and administrators could more easily be arranged for shorter terms than for the present long semesters. Family vacations during the winter are becoming more popular and could readily be fitted into the proposed new timetable.

Some universities and colleges would need to rearrange their terms to accommodate teachers seeking further preparation, but it could be done. In fact, the schedule I suggest is just as applicable to higher education as it is to schools. The school year, the calendar year, and the tax year would all be brought into alignment. The more I think about this idea the better I like it. The present American "school year" has little to support it nowadays except tradition and ponderous inertia.

More meat. As the five-year Cooperative Program in Educational Administration comes to a close, the various centers are issuing some valuable reports of research. They are of a higher standard, I believe, than most of the interim reports—there is more meat in them, and they are characterized by a more forward looking view.

One of the most weighty is the 141 page book, "Factors Affecting Educational Administration," published in December by the C.P.E.A. in Ohio.[1] The heart of the investigation reported was the identification and evaluation of 37 factors (interpersonal and environmental) that affect the quality of administrative behavior. Most school administrators will enjoy and profit from a careful reading of this study. It's almost like sitting in on an advanced seminar in school administration, and as deliberate in style as seminars usually are! (A few grammatical and typographical errors can be overlooked.)

However, the greatest use for this document, in my mind, is in universities and colleges seeking ways to improve the selection and preparation of prospective administrators. There is enough here to enrich thinking and planning for several years.

Self-help. The Southwestern C.P.E.A. at the University of Texas issued a few months ago another interesting but quite different sort of report, "Nine Help Themselves."[2] One distinguishing characteristic of this 241 page volume is the fact that it was prepared not by a professor of education but by a professor of sociology, Harry E. Moore, member of the university's C.P.E.A. committee. Following two chapters on the community matrix of school administration, the report tells the detailed story of nine small Texas communities' efforts at self-improvement, with the schools playing a leading rôle. Roughly a period of four years is covered in the book.

The problems attacked are mostly ordinary, and the results are certainly not sensational or spectacular. It would be easy to write off the whole program as a sort of mountain bringing forth a mouse. Yet progress is seldom made in giant strides. It has always been chiefly the cumulative effect of many small and continuing efforts that makes the American school system strong. The report is reminiscent of Walter Hines Page's "The Rebuilding of Old Commonwealths,"[3] but it is not so inspirational.

C.I.O. views on segregation. Another hot subject which seems to be getting hotter month by month is school integration. If you are interested in this (and who isn't?) I strongly recommend the packet of materials prepared by the C.I.O. Department of Education and Research.[4] A compilation of about 20 articles, booklets and reports from both northern and southern sources, it's a real

[1]University Press, Ohio State University, Columbus. $2.

[2]Southwestern Cooperative Program in Educational Administration, University of Texas, Austin.

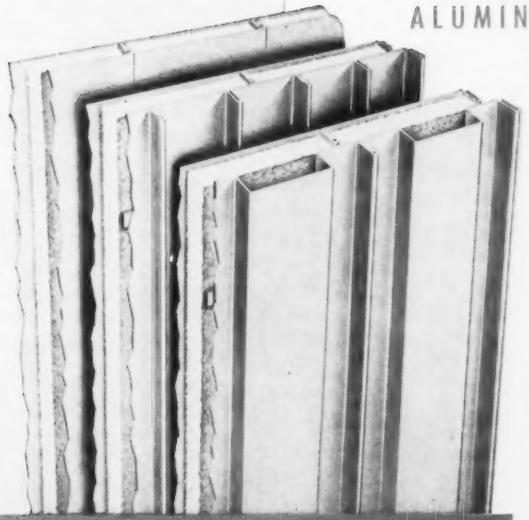
[3]A collection of three essays published in 1902 and republished in 1952 for the National Citizens Commission for the Public Schools by Harper and Brothers, New York, under the title The School That Built a Town. $1.75.

[4]718 Jackson Place, N.W., Washington, D.C. $1.

INSULATED METAL WALLS

for SCHOOLS and INSTITUTIONAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL



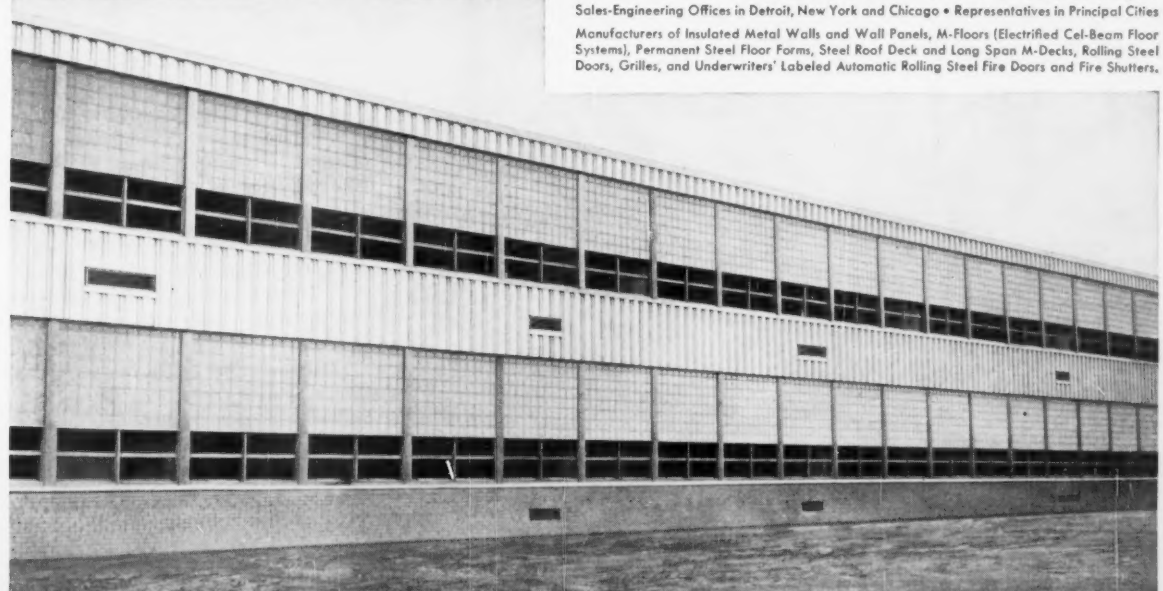
FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent to or Better than Conventional 16" Masonry Wall

The modern school building illustrated below is another excellent example of architectural design effects obtainable with Mahon Insulated Metal Walls in combination with brick and other materials. In this particular building, Insulated Metal Wall Panels, with Stainless Steel exterior plates, were employed for curtain walls in spandrel areas with glass block in the upper part of window openings below. The architect has achieved an unusually attractive over-all appearance with the lasting beauty and permanence of Stainless Steel. The advantages of Insulated Metal Walls, however, are not confined to design effects obtainable . . . important building economies are realized through lower material cost, lower labor cost, and the accumulative advantages of reduced construction time resulting from rapid erection. Buildings can be quickly enclosed with Insulated Metal Walls—even under extreme low temperature conditions which would preclude masonry construction. Mahon Insulated Metal Walls are available in three exterior patterns . . . the Mahon "Field Constructed" Fluted or Ribbed Wall can be erected up to sixty feet in height without a horizontal joint—a feature of Mahon Walls which is particularly desirable in auditoriums, armories, powerhouses and other buildings where high expanses of unbroken wall surface are common. See Sweet's Files for complete information, or write for Catalog No. W-56.

THE R. C. MAHON COMPANY • Detroit 34, Michigan

Sales-Engineering Offices in Detroit, New York and Chicago • Representatives in Principal Cities

Manufacturers of Insulated Metal Walls and Wall Panels, M-Floors (Electrified Cel-Beam Floor Systems), Permanent Steel Floor Forms, Steel Roof Deck and Long Span M-Decks, Rolling Steel Doors, Grilles, and Underwriters' Labeled Automatic Rolling Steel Fire Doors and Fire Shutters.



Edison Junior High School, West Mifflin Boro, Pennsylvania. Lamont H. Sutton and Paul P. McLean, Architects. Nicholas LaDonne, General Contractor.

MAHON

bargain. If you are opposed to desegregation you won't like these items, but it will be good for your soul to read them anyway.

Best seller. What should be a best seller on local school plant development, "The Road to Better Schools,"[5] was released in December by the New England School Development Council, an association of 100 school systems. In its 156 pages every phase of school plant planning is covered, including sample work sheets for recording and analyzing data.

The sections on estimating pupil population and on educational specifications are especially well done. A 50 page section of "Do's and Don'ts" of school building planning is also excellent. The parts dealing with financing a building program and site selection do not compare well with the rest of the book. For the latter topic, however, see an earlier council publication, "How to Choose a School Site" (1947).

[5]New England School Development Council, 20 Oxford Street, Cambridge, Mass.



READER OPINION

Real Cooperation

When I read your editorial "This Is Real Journalism" in the January issue of The NATION'S SCHOOLS, it reminded me that early last fall the managing editor, Eugene Pulliam Jr., of the *Indianapolis News* told me that he had an opportunity to buy the Flesch series but, since he knew from his own experience that it didn't apply to the Indianapolis public schools, he wasn't interested. However, the series did run in the *Indianapolis Times*, a Scripps-Howard publication. At the same time it was running in the *Indianapolis Times*, the *Indianapolis News* sent a reporter to the schools and wrote a series on how well the Indianapolis schools were teaching reading. I call that real cooperation.—HERMAN L. SHIBLER, *general superintendent of education, Indianapolis.*

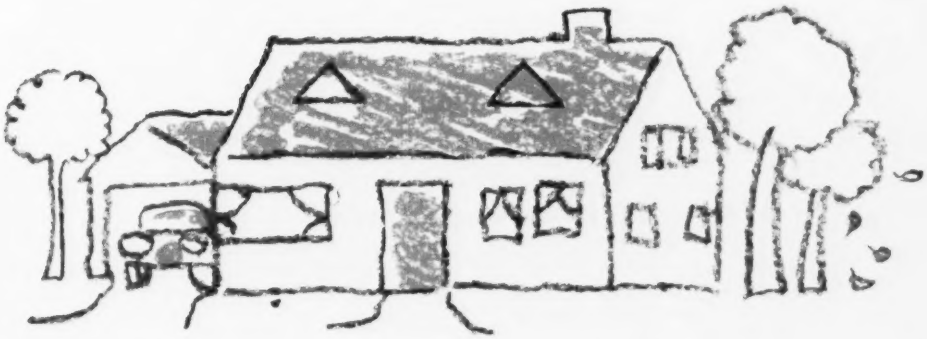
Teacher-Aide Plan

For some time it has been clear that much work now being done by teachers could be done as well or better by others qualified in their respective fields. The use of clerical workers to keep records, to copy data, to type letters, and to do school mimeographing would be an illustration of this.

An attempt is being made in the Cooperative Study for the Better Utilization of Teacher Competencies (see comment following this letter) to find other duties ordinarily done by teachers which could be performed by assistants of various types and thus leave the qualified teacher free to spend her valuable time as a child specialist and educator to work with children both individually and in groups, to confer with parents, and to contribute constructively to community development. Within this proposed pattern of teachers' assistants lies a real danger which should not be overlooked. A teacher's real effectiveness with a given student depends upon a thorough understanding of all sides of that student's life—emotional, physical, mental, spiritual. The elimination of a multiplicity of personal contacts between teacher and student surely will weaken the understanding between the teacher and that student.

A hidden danger also lies in the present shortage of school finances and teachers and the resultant pressure upon school boards and administrators to find an easy way out of their di-





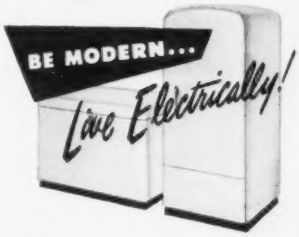
No matter how large or small their homes...

this subject is a necessity to your students!

The size of the home or the circumstances of the average family no longer have much bearing on the use of a food freezer. You find this appliance in all types of homes, because it has become a *vital factor* in modern meal preparation.

That's why your students need instruction on the packaging, freezing and storing of foods. The modern home freezer now makes it possible for the efficient homemaker to feed her family well with less work, in less time and at lower cost than without it. That's why food freezing is a necessity in your home economics curriculum.

You need freezers to teach food freezing! Unless your home economics department is equipped with food freezers for teaching purposes, your teachers are handicapped. They can't give practical demonstrations in classes. This appliance is easily installed, needs no special wiring—just plugs in. The purchase cost is moderate, and your local electric light and power company or electric appliance dealer can give you all the facts.



If your school does not have the

FREEZER TEACHING KIT...

This Kit provides visual aid for home economics teachers, to simplify freezer instruction in the classroom. It consists of 12 beautiful, full-color wall charts and the Home Freezer Teaching Guide. Be sure each of your schools has a Kit. Send for it yourself and present it to the home economics teacher.

HOUSEHOLD REFRIGERATOR AND FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, Dept. NS-3-56
New York 17, N. Y.

Please send me, absolutely FREE, the NEMA Freezer Teaching Kit.

Your name and title.....

Name of school.....

Address.....

City.....Zone....State.....

HOUSEHOLD REFRIGERATOR AND FREEZER SECTION
National Electrical Manufacturers Association • 155 East 44th Street, New York 17, N. Y.
ADMIRAL • CROSLEY • FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT • KELVINATOR • NORGE • PHILCO • QUICFREZ • WESTINGHOUSE • WHIRLPOOL-SEEGER

THE NATION'S SCHOOLS

EDITORIAL CONSULTANTS

ADMINISTRATION
JOHN GUY FOWLKES ..... *University of Wisconsin*
CALVIN GRIEDER ..... *University of Colorado*
JAMES M. SPINNING ..... *Rochester, N.Y.*
HERMAN L. SHIBLER *Indianapolis Public Schools*

FINANCE
ARVID J. BURKE *New York State Teachers Assn.*

INSTRUCTION
WILLARD E. GOSLIN ..... *George Peabody College*
F. DEAN MCCLUSKY ..... *University of Calif., L.A.*

PERSONNEL
C. C. TRILLINGHAM *Los Angeles County Schools*
K. E. OBERHOLTZER ..... *Denver Public Schools*

RURAL SCHOOLS
JULIAN E. BUTTERWORTH ..... *Ithaca, N.Y.*
M. L. CUSHMAN ..... *University of North Dakota*

STATE ADMINISTRATION
P. J. MOFFITT ..... *Assoc. Comr., New York*

INTERPRETATION
WORTH MCCLURE ..... *Exec. Sec'y, A.A.S.A.*
PAUL J. MISNER ..... *Glencoe Public Schools*

SCHOOL LAW
LEE O. GARBER ..... *University of Pennsylvania*

SCHOOL LUNCH
MARY DEGARMO BRYAN ..... *Columbia University*

SCHOOL PLANT
RAY L. HAMON ..... *U.S. Office of Education*
JOHN H. HERRICK ..... *Ohio State University*
THOMAS J. HIGGINS ..... *Chicago Public Schools*

MAINTENANCE, OPERATION, SUPPLIES
FRANCIS R. SCHERER ..... *Rochester Public Schools*
JOHN W. LEWIS ..... *Baltimore Public Schools*

AUDIO-VISUAL
WALTER A. WITTICH ..... *University of Wisconsin*

HIGHER EDUCATION
W. W. HAGGARD ..... *W. Wash. Coll. of Ed.*
DAVID D. HENRY ..... *University of Illinois*

EDITORIAL ADVISORY BOARD

HOMER W. ANDERSON ..... *Lakeland, Fla.*
L. FRAZER BANKS ..... *Birmingham Public Schools*
S. M. BROWNELL ..... *U.S. Comr. of Education*
FRANCIS S. CHASE ..... *University of Chicago*
HOBART M. CORNING ..... *District of Columbia*
C. L. CRAWFORD ..... *Mankato Teachers College*
NED H. DEARBORN ..... *National Safety Council*
E. A. DENNARD ..... *Waco Public Schools*
EARL A. DIMMICK ..... *Pittsburgh Public Schools*
ARTHUR DONDINEAU ..... *Detroit Public Schools*
JOHN R. EMENS ..... *Ball State Teachers College*
MARTIN W. ESSEX ..... *Akron Public Schools*
SAMUEL E. FLEMING ..... *Seattle Public Schools*
L. C. HALBERSTADT ..... *Terre Haute Public Schools*
F. G. HOCHWALT *Nat. Catholic Welfare Conf.*
HEROLD C. HUNT ..... *U.S. Dept. of H.E.W.*
SCHUYLER C. JOYNER *Los Angeles Public Schools*
H. M. KALLEN *New School for Social Research*
ERNEST G. LAKE ..... *Racine Public Schools*
JAMES D. MACCONNELL ..... *Stanford University*
CHESTER F. MILLER ..... *Saginaw Public Schools*
HOLLIS A. MOORE SR. ..... *Tyler Public Schools*
P. M. MUIR ..... York Township, Toronto, Can.
JAMES F. REDMOND *New Orleans Public Schools*
W. C. REUSSER ..... *University of Wyoming*
PAUL W. SEAGERS ..... *Indiana University*
HAROLD SPEARS ..... *San Francisco Public Schools*
LINDLEY J. STILES ..... *University of Wisconsin*
W. W. THEISEN ..... *Milwaukee Public Schools*
EDMUND H. THORNE ..... *West Hartford Schools*
PAUL D. WEST ..... *Fulton County Schools*
W. T. WHITE ..... *Dallas Public Schools*
H. I. WILLETT ..... *Richmond Public Schools*
BENJAMIN C. WILLIS ..... *Chicago Public Schools*

lemma. I suppose all serious research should be undertaken with a long-term view to the general betterment of educational practices and not be geared to the exigencies of the present emergency.—NETTIE N. LEASURE, *professor of education, Manchester College, North Manchester, Ind., and member, National Advisory Committee of the Cooperative Study.*

A LOT OF INQUIRIES

This study of the teacher-aide plan is now in its fourth year. It was described by its director, Charles B. Park, in The NATION'S SCHOOLS **56:**45 (July) 1955. Headquarters of the study are at Central Michigan College, Mount Pleasant, Mich. A recent letter from Mr. Park reports:

"We sure are getting a lot of inquiries nationally as a result of the *Collier's* and *Reader's Digest* stories, and also as a result of the Edward R. Murrow show.

"Our staff has helped set up an experimental program in Ogden, Utah, and it is possible that something may be started in Pharr, Tex., and in Greece, N.Y. We now have 25 schools in Michigan and will hold to that number during the present year and during the last year of our study so that we can do a reasonable job of evaluation and fact-finding before we finish up.

"We sure have had a lot of favorable comments from The NATION'S SCHOOLS story. From the standpoint of the profession, I think it did us more good than the other publicity which we have received."

"It's Too Small to Play House. Let's Play School."



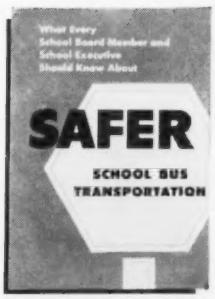
Herblock; copyright 1955 The Washington Post Co.

FOR SAFETY'S SAKE

specify AIR BRAKES—



The brakes proven for safer operation on virtually every public bus in the nation!



WRITE FOR FREE INFORMATION

Here's the complete story on how much Air Brakes can contribute to school bus safety. Write to the factory today.

Over the years in public bus operation, Air Brakes have proved to be the safest, most dependable stopping power under every operating condition. In fact they have rolled up such an overwhelming degree of superiority over all other types of brakes that virtually all of the 103,000 public buses operating in 1954 were Air Brake equipped!

The reason is obvious—public bus companies can't afford to take chances on passenger safety.

As a school administrator, charged with the vital responsibility of providing school children with safe school bus transportation, we think we can assume that you won't want to take chances either. That's why we recommend you make certain your students receive all the extra protection of the world's safest braking system by *insisting* that all bids submitted to your board on new school buses include Air Brakes.

The choice is yours—for safety's sake be sure you make it dependable Bendix-Westinghouse Air Brakes!

THE BEST BRAKE IS AIR . . . THE BEST AIR BRAKE IS

Bendix-Westinghouse

BENDIX-WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY

General offices and factory—Elyria, Ohio. Branches—Berkeley, Calif. and Oklahoma City, Okla.

BENDIX-WESTINGHOUSE GENUINE AIR BRAKES REG. U.S. PAT. OFF.

ROVING REPORTER

Principal Trains College Educated Parents as Substitutes • Third Graders Model Animals From Clay • Studying Shakespeare Can Be Fun

ONE DAY Rita Duffy, principal of the Schwarting Elementary School at Plainedge, N.Y., was called in to teach a sixth grade class. No substitute was available, and Mrs. Duffy subsequently learned that for 4800 pupils in the district's five schools there were only five certified teachers as substitutes.

That's when Mrs. Duffy decided to inaugurate a program for training college educated parents as substitutes. Sixty persons are now studying nights in a special adult education course that will qualify them by next fall to teach on a limited basis. The two-hour classes are held every Thursday.

While New York State laws require teachers to be certified if they are to teach more than five days a year, local school boards may adopt such expediencies as are necessary. Mrs. Duffy's students, who will be graduated in May, will be qualified to teach only in the Plainedge district.

"My immediate purpose is to get substitute teachers to relieve this terrible shortage," Mrs. Duffy said. "But my long-range purpose is to get college graduates interested in going back to school to qualify themselves to adopt teaching as a profession."

Several of her students have enrolled at local colleges to take the work necessary for state certification.

WHEN A TEACHER got excited about ceramics, it wasn't long until her enthusiasm spilled over into her classroom. Soon the third graders were using simple molds to make such presents for their parents as vases, ashtrays, spoon drips, and string holders.

"The cost of materials was little higher than that of other crafts, and the professional quality of the finished objects gave a tremendous feeling of satisfaction to the children," Kitty B. Crettet, the teacher, explained.

At first she fired the children's ware at home in her own kiln. Then the superintendent and board became interested and bought a kiln for the use of the elementary school at Long Beach, Miss.

Eventually the teacher decided to see if the children could also do more "creative" work. She bought 40 pounds of terra cotta clay and began reading Kipling's "Just So Stories" to the children. Then she passed out lumps of clay with which they could model the animals in the stories. She put jars



of matt glazes on a table and let them use colors they liked.

The figures were delightful, said Mrs. Crettet. Some were crude, but they were all original.

The children had decided not to look at the illustrations in the book as they wanted to create what they saw in their own minds. One 8 year old made a beautiful horse, with a tail almost as large as his body. "Don't you think the tail is a little large?" Mrs. Crettet asked. "But that is how I see him in my mind," the child replied. Teacher retreated.

The clay and glazes are water soluble and can be washed easily from hands and clothing. If the child doesn't like what he has just done, he wads up the clay, adds a few drops of water to keep it from getting too dry, and starts over.

TO TEACH or not to teach Shakespeare—that is a question in many high schools. Teacher Patricia Paden Hammond thinks the answer should be to teach it—if you can do it so that the students enjoy themselves and learn.

Her own students at Tahlequah, Okla., after reading the play, pictured several scenes from "Julius Caesar" on flannelboard. One boy said, "When you draw these characters, dress them, and attempt to place them in authentic settings, you feel they are real people."

The study began with a film showing the life of Shakespeare and the development of the Elizabethan theater. The students read the life of Caesar. Then the play was read in class, partly by students and partly by the instructor.

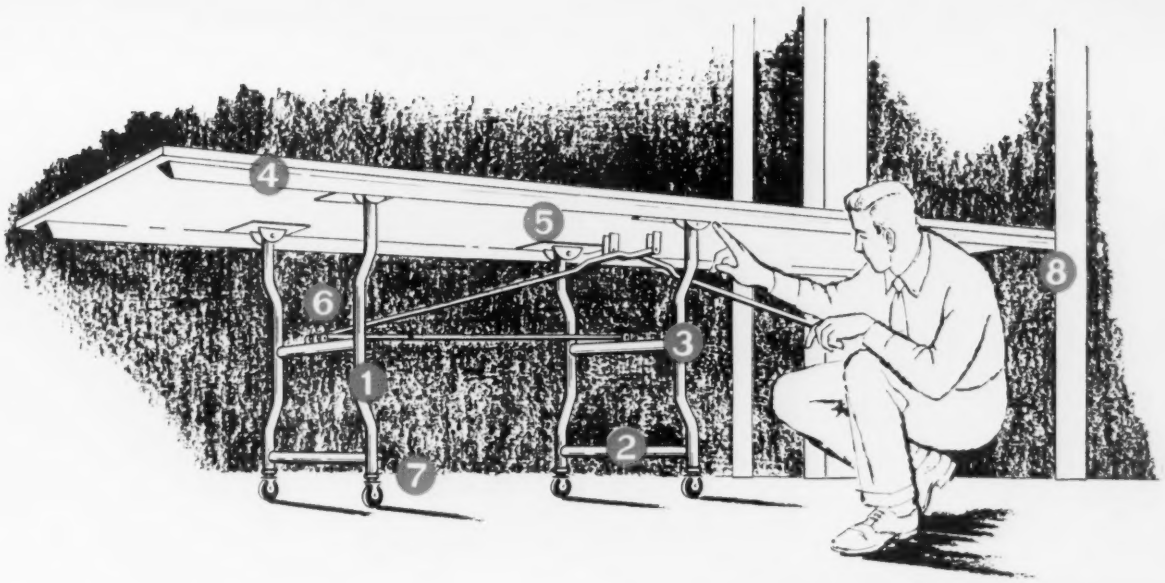
The students voted on the scenes they considered outstanding—Caesar's assassination, Mark Anthony's funeral oration, and the suicide of Brutus.

Students grouped themselves according to which scene was their favorite; the groups elected chairmen and secretaries. Each group developed its scene on flannelboard, using a piece of heavy cardboard covered with flannel, crayons, scissors and glue. Figures of characters were drawn on cardboard, cut out, and dressed in bits of cloth.

Once the general directions had been given, the teacher pursued a hands-off policy, giving no help or suggestions to the students. Members of each group worked together to plan the scenes, itemize materials needed, and delegate tasks.

The students spent four days working on their scenes; the room was strewn with materials, and there were heated arguments over costumes and background. Many reference books from the library were consulted.

There were mistakes made — one group's Roman temple looked rather like a cathedral—but the teacher thinks that the somewhat three-dimensional pictures produced were most worth while. The chairman of each group presented its scene to the class, relating the story of it and explaining his group's development of it.



It's the things you don't notice every day that makes SCHIEBER folding tables and benches last so long

1. 1-1/16" steel tubing with heavy ⅛" wall thickness
2. Full 1-1/16" steel tubing cross members
3. All joints electric welded
4. Formed steel reinforcing stringers length of tables and benches
5. All screws expansion type rated 600 lb. pull test
6. Machined clevis pin hinges that eliminate rack, weave and rattle
7. Rubber casters with permanent oil impregnated bearings
8. Welded pocket tracks and "T" type roller heads that prevent accidental disengaging

To the best of our knowledge no Schieber unit has ever worn out. The first installation, made 25 years ago, is still in daily use. It's hard to evaluate this kind of quality but it may account for the fact that school administrators and school architects almost invariably specify Schieber.



Recent Schieber installation, Lynnwood Junior High, near Edmonds, Wash. William Arild Johnson and Harry E. Botesch, architects and engineers.

IN-WALL
PORT-A-FOLD
MOBIL-FOLD
TRANSI-FOLD

SCHIEBER 1931 25 1956 FOLDING TABLES BENCHES

Schieber
SALES COMPANY
Detroit 39, Michigan

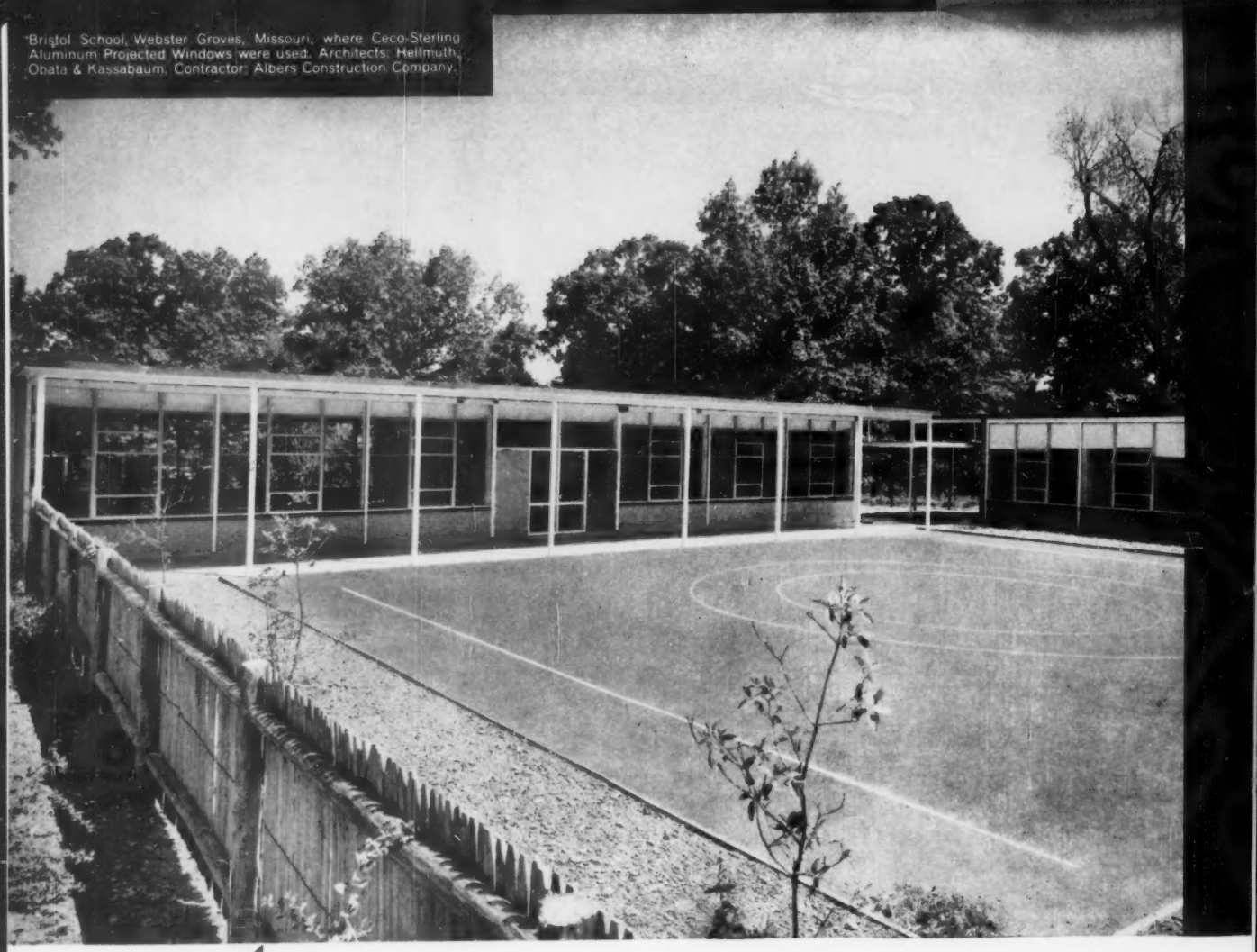
Representatives in all areas—U. S. & Canada



A NEW SCHIEBER PRODUCT

Complete new concept. Honeycomb core reduces weight to ⅓. No floor tracks or guides, yet positive floor seal. New surface resists mars, scratches, vandalism. Electric-hydraulic operation.

SCHIEBER-HAWS FOLDING PARTITIONS



Bristol School, Webster Groves, Missouri, where Ceco-Sterling Aluminum Projected Windows were used. Architects: Hellmuth, Obata & Kassabaum. Contractor: Albers Construction Company.

Windows of quiet beauty complement an award-winning

Ceco-Sterling Aluminum Projected Windows with Tubular Vertical Mullions Achieve Narrow Sight-Lines... Afford Maximum Daylighting... Reduce Maintenance Costs

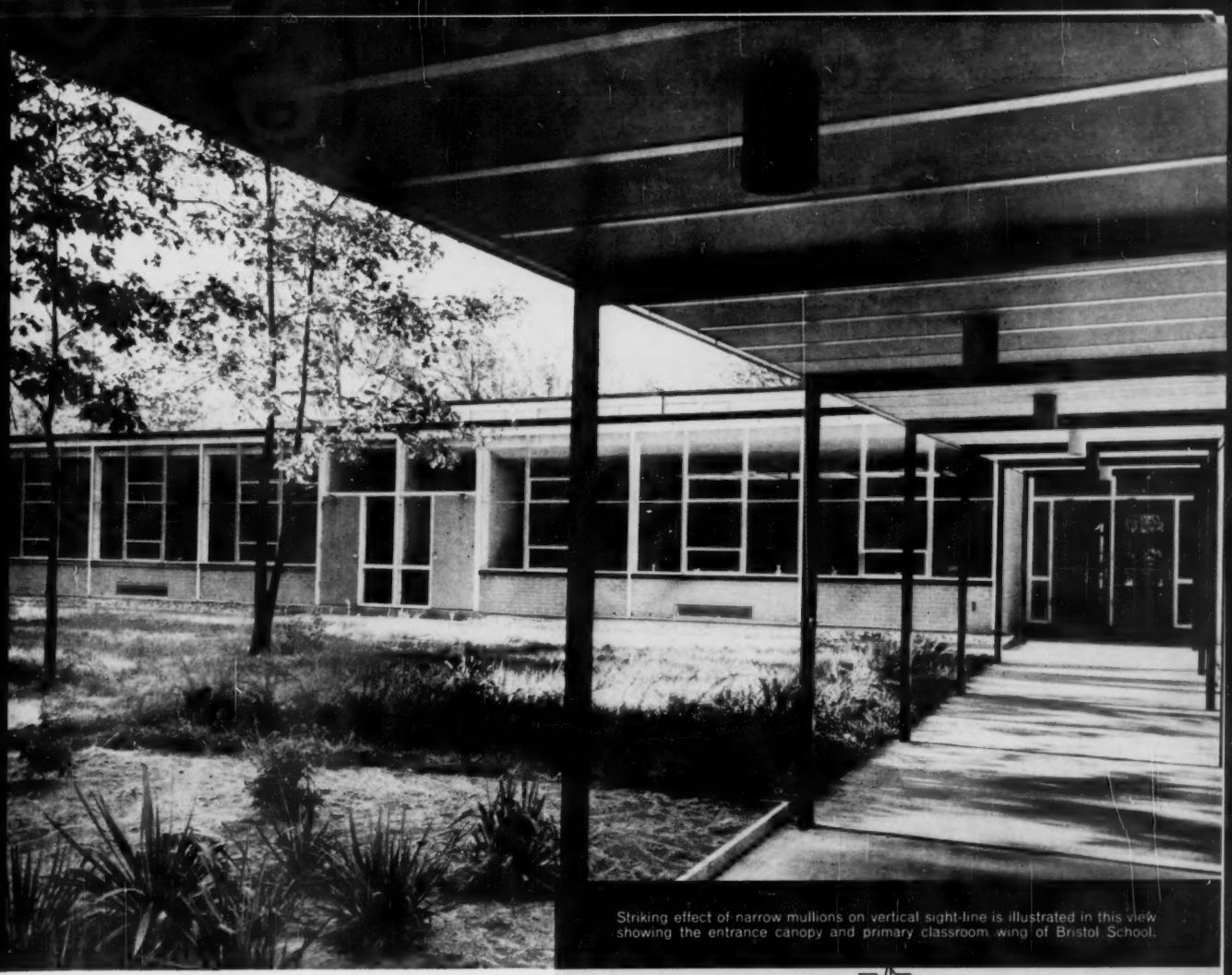
It's a combination of many things—some aesthetic—some functional—that determines the winner of a top award in a national school competition. So it was with the Bristol School, Webster Groves, Missouri, which received an award of merit from the American Association of School Administrators. The aim of architects Hellmuth, Obata & Kassabaum was to create an attractive environment centered around the physical and psychological needs of young children. Much thought was given the site and building position. Good illumination came in for careful study, and here Ceco-Sterling Aluminum Projected Windows were used for maximum daylighting. Ceco engineers worked closely with the architects in developing a tubular vertical mullion to achieve an extra narrow sight-line. The clean, neutral tones of aluminum windows combined pleasingly with gay colored panels in the entrance. All in all, the windows complemented the architectural concept. Since aluminum never needs painting, maintenance savings were assured. So—on your next project, consider Ceco's broad line of windows. They offer the variety and craftsmanship to meet your window requirements.

CECO STEEL

CECO STEEL PRODUCTS CORPORATION

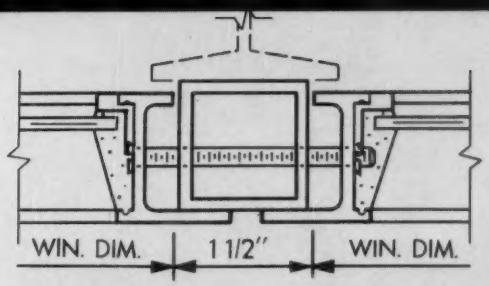
Offices, warehouses and fabricating plants in principal cities
General Offices: 5601 West 26th Street, Chicago 50, Illinois

IN CONSTRUCTION PRODUCTS CECO ENGINEERING MAKES THE BIG DIFFERENCE

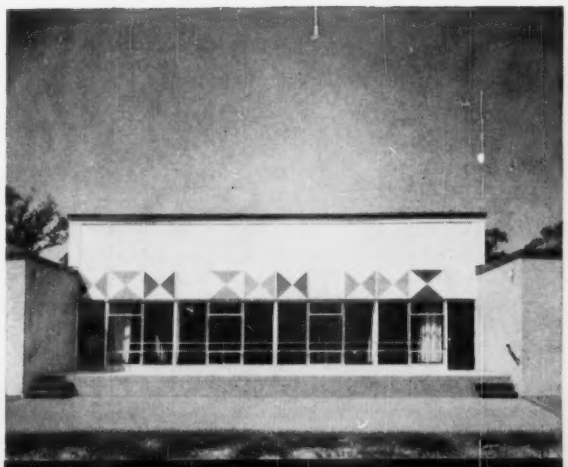


Striking effect of narrow mullions on vertical sight-line is illustrated in this view showing the entrance canopy and primary classroom wing of Bristol School.

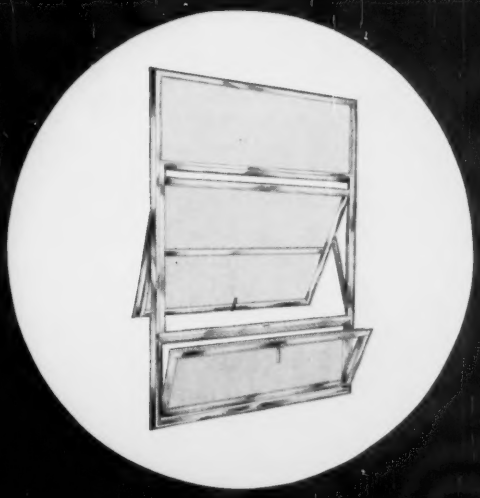
school . . .



Mullions, being only 1½" wide instead of the usual 2½", do not compete with the sight-lines established by the building's 10-foot module design.



The neutral tone of Ceco-Sterling Aluminum Windows blends with panels of red, blue and yellow to provide a striking entrance for the Bristol School.



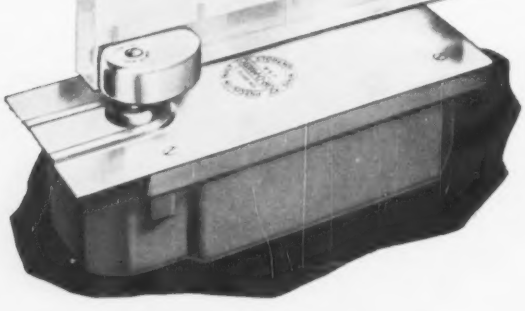
Ceco-Sterling Aluminum Projected Windows are especially suitable for schools. Ventilators have two-point contact, assuring tightest weatherseal. Handsome hardware is designed in keeping with modern, functional thinking.

DOR-O-MATIC

CONCEALED-IN-THE-FLOOR

DOOR CONTROLS

with built-in protection



DOR-O-MATIC INVISIBLE DOR-MAN NOW AVAILABLE IN 2 MODELS

If you wish to have completely automatic door controls, choose the Invisible Dor-Man . . . in carpet-actuated or handle-actuated models. Either type will open your doors quickly, quietly, automatically.

SEND FOR ILLUSTRATED BROCHURES TODAY

6163

Control as they open
Control as they close

Select Dor-O-Matic for metal, glass, or wood doors. Installed with any one of them, Dor-O-Matic gives uniform opening control and produces a positive, 2-speed, door closing action . . . yet your door retains an eye-appealing appearance.

Dor-O-Matic's special protective features include a positive back-stop and built-in hold-open device (optional). They protect doors and walls. Safer for children, too. Simple design and finest construction assure long, trouble-free service. Choose yours now from 25 models.

Only DOR-O-MATIC provides these 10 service advantages

1. Positive uniform control
2. Built-in hold-open device
3. No accidental hold-open
4. Positive centering of door
5. Positive back-stop
6. Two-speed closing action
7. Built-in leveling screws
8. Permanent oil seal at spindle
9. No seasonal adjustment
10. Easy installation



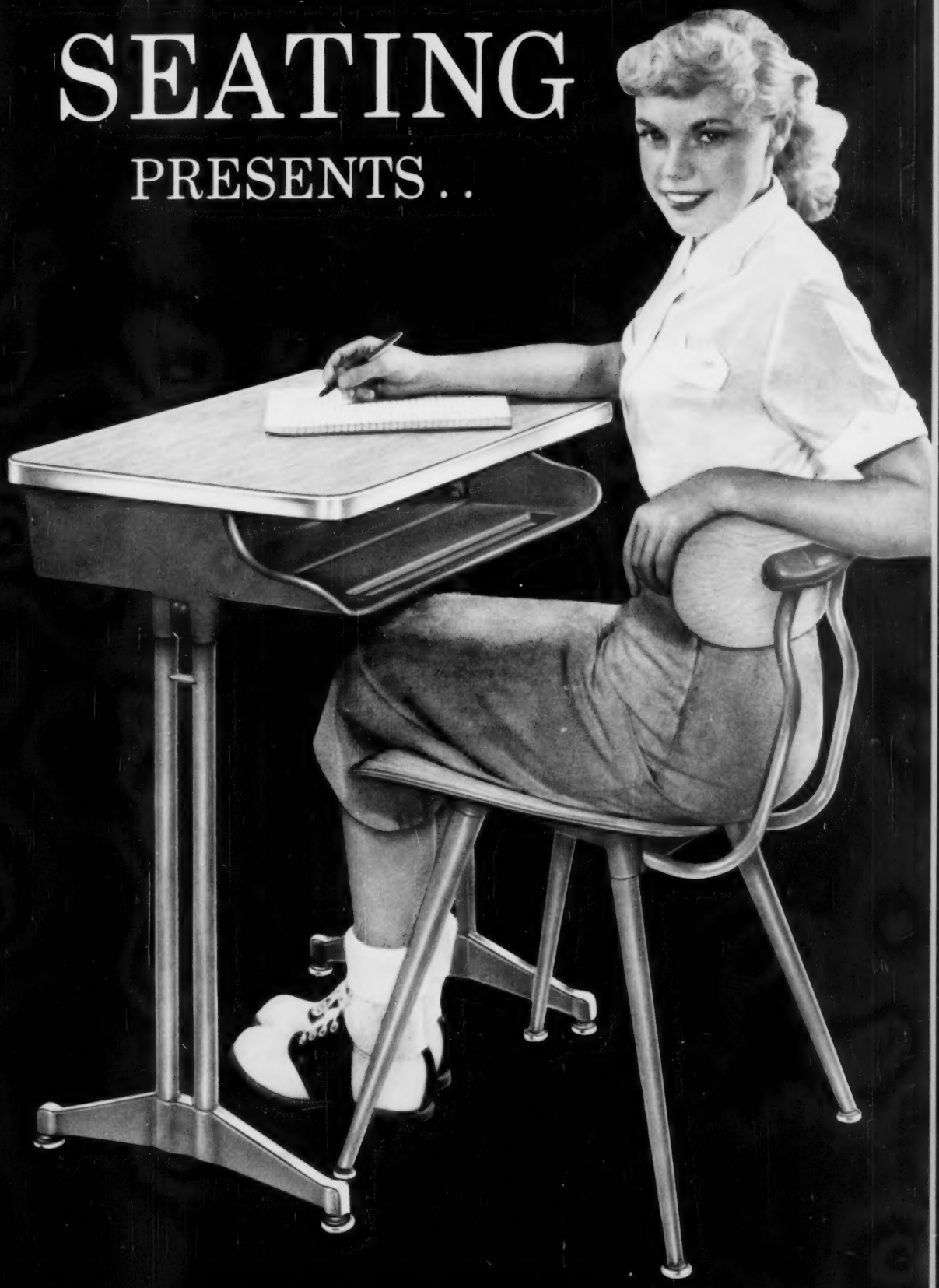
DOR-O-MATIC

DIVISION OF REPUBLIC INDUSTRIES, INC.
4430 North Knox Avenue • Chicago 30, Illinois

IN CANADA: Dor-O-Matic of Canada, 550 Hopewell Ave., Toronto 10, Ont.
EXPORT REPRESENTATIVES: Consultants International, 11 W. 42nd St., New York 36

AMERICAN SEATING

PRESENTS . .





Now! American Seating sets the style in classroom furniture with Coloramic CLASSMATES — a completely new line of functional tables and chairs styled to keep your school modern!

CLASSMATE tables have self-leveling, silicone-floating glides which adjust automatically to uneven floors. Slim, sturdy steel standards afford maximum leg room. Height is adjustable in 1" increments.

CLASSMATE chairs are comfortable and posture-perfect — adapting form and structure to body shapes . . . with comfort-contour seats and backs.

Usual "school" colors are replaced by Diploma Blue and Classday Coral, lending new brightness to classrooms.

Call your American Seating representative, today, for full details. Or write us direct.

New COLORAMIC CLASSMATES*

By AMERICAN SEATING COMPANY



New CLASSMATE unit tables feature American Seating's Amerex® top, the very best of high-pressure-type plastics — smooth, hard, non-glare surface, no wood parts; protected by aluminum banding. Open-front book-box with natural corner entry provides ideal access to contents. Ask about CLASSMATE No. 549.



Rubber-cushioned ball-joint glides on CLASSMATE chairs self-align themselves to floors. Deep-curved backs tilt to fit each occupant. Roomy seats are compound-curved for maximum comfort. Tapered, stretcher-free legs; girder-and-post, *closed*, welded construction. Ask about No. 540.

*Trade-mark of American Seating Company. CLASSMATE furniture is covered by patents and patents pending.

Copyright 1956, American Seating Company



CLASSMATE chair-desks feature Amerex aluminum-banded plastic tops; curved, tilting backs; contour seats; center-divided book-racks. Available in 13" through 18" heights. No. 542.



American Seating Company's new CLASSMATE line includes smart tablet-arm chairs in 17" and 18" heights. Non-trash-collecting book-racks; Amerex plastic arm. Ask about No. 543.

. . . styled to keep your school modern



CLASSMATE unit table with exclusive "10-20" Amerex aluminum-banded metal-and-plastic top — adjusts silently to 10° or 20°, or level. Steel book-box; all corners rounded. No. 548.



Amerex aluminum-banded plastic top on two-pupil CLASSMATE table is 24" x 48". Steel-girder underframe. Uni-Stow box extra. Also 30" x 60", 30" x 72", 36" x 72" sizes. No. 140.



Equip classrooms for any age group with No. 540 CLASSMATE chairs. Come in NINE SEAT HEIGHTS, in 1" increments, 10" through 18". (The 10", 11", 12" sizes are available in coral or blue; rest in blue only.)

AMERICAN SEATING

WORLD'S LEADER IN PUBLIC SEATING

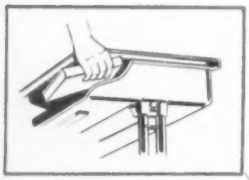
Mfrs. of School, Auditorium, Theatre, Church, Transportation, Stadium Seating; Folding Chairs

Copyright 1956, American Seating Company

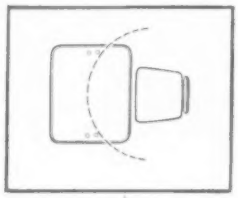
New comfort, convenience, functional design, and durability features of COLORAMIC CLASSMATES

New Coloramic CLASSMATES are of a type of functional design that blends with school architecture. Tables and chairs are of rigid steel construction – yet are surprisingly light in weight. Handsome Amerex plastic tops and arms. Durable baked-enamel finishes–in smart two-tone–lend new cheer to classrooms.

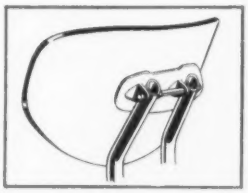
Backed by extensive research, and built to the most exacting engineering standards in the industry, American Seating school furniture outlasts ordinary furniture many years, offers you *more* value per dollar. Let us prove this to you in terms of your own school budget. Call or write us today.



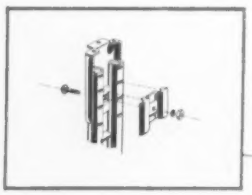
Visible-storage book-box with natural corner entry, and pencil tray. All-steel, curved-corner, sanitary design.



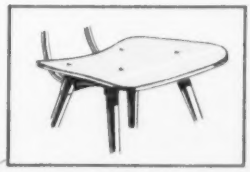
With pedestal standards, it's easier to get in and out of chair; *less* space is needed for pushing back the chair.



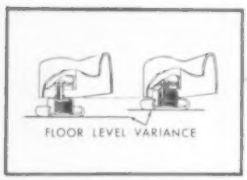
Backs on CLASSMATE chairs are curved to conform to all pupils' backs; tilt on concealed pivots. Back-braces are offset for extra hip room.



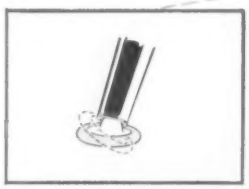
CLASSMATE tables permit adjustment up or down. Bolt-and-nut assemblies adjust each book-box to four positions; three basic standards provide heights of 20″ through 30″.



Comfort posture seats on CLASSMATE chairs are compound-curved – that is, curved from front to back *and* side to side.



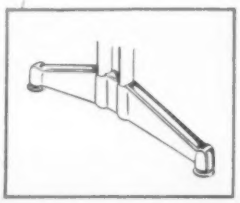
Self-leveling, silicone-floating, hardened-steel glides cushion and adjust tables to uneven floors quickly – an *exclusive* American Seating feature. Chrome-plated to eliminate floor-marring.



Rubber-cushioned, ball-joint chair glides self-align themselves to floor contours. Chrome-plated, hardened-steel glides slide smoothly, won't mar floor surfaces.



Girder-and-post welded construction assures long life, with hardest use. Tapered legs give maximum area, and strength, at welds. Closed construction throughout.



Aluminum scuff strips on the feet of CLASSMATE tables prevent wearing of finish, help maintain new appearance indefinitely–another important American Seating feature.

AMERICAN SEATING

Grand Rapids 2, Michigan • Offices and Distributors in Principal Cities

WORLD'S LEADER IN PUBLIC SEATING

Litho in U.S.A.

in a class by itself . . .



Burroughs Itemizing Cash Register gives you a locked-in audit tape of every cafeteria transaction... clearly labeled!

Here's the truly low-cost cash register with all the automatic and protection features you need to make your cafeteria operation smooth as clockwork. Take that audit tape, for instance. It tells you and Uncle Sam exactly which amount was collected for a subsidized student lunch, a sandwich from the snack bar, an adult lunch. *And it's all done automatically!*

As your cashier prepares an itemized, descriptive receipt for each student and adult, the Burroughs automatically repeats the entire transaction on the audit tape. The end result: you get a detailed, coded record—with no additional effort—of the money you collect for every lunch and snack. The figures you need for governmental reports are automatically prepared for you.

In all other ways, too, your Burroughs is the last word in automation. It features the famous short-cut keyboard for fast, accurate check-out accounting . . . there's no waiting for slow-up machine operations. When you take a total, the cash drawer pops open and the receipt automatically spaces for removal. Turn a key, and your Burroughs automatically converts to an adding machine for miscellaneous figuring work. Burroughs cash registers are available in both hand and electric models.

Reason enough to put a Burroughs to work in your cafeteria? If not, one demonstration will certainly convince you! Call our nearest branch office, or write: Burroughs Corporation, Detroit 32, Michigan.

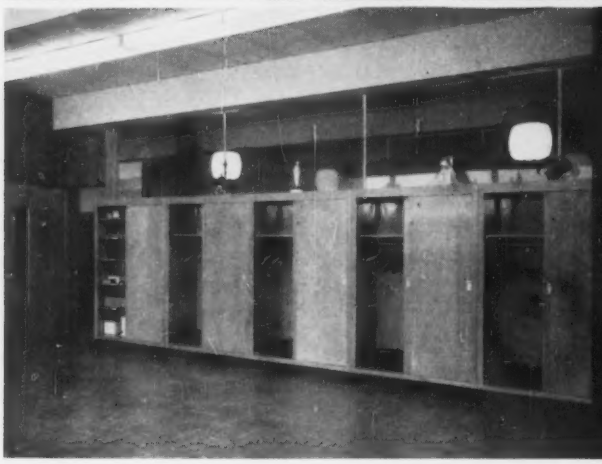
Wherever There's Business There's Burroughs

"Burroughs" is a trademark



FINEST INSTITUTIONAL QUALITY

COPPES NAPANEE



in the world's MOST COMPLETE LINE of HARDWOOD SCHOOL FURNITURE

Education is a "living" thing—and only COPPES NAPANEE, of all fine customized school furniture, is engineered to "grow" with it.

The interchangeable structure and interior assembly of **Coppes Napanee** casework simplifies construction and installation costs . . . produces the widest design combinations to best meet classroom requirements. This same versatility also lends itself to modifications—thus affecting additional savings when changing conditions dictate revisions in the original installation.

The long-range aspect of **Coppes Napanee** economy is further exemplified by the superiority of **Coppes Napanee** workmanship. Selected hard maple gives even the most basic cases and cabinets the strength of a gymnasium. And **Coppes Napanee's** exclusive furniture finish embodies the surface with a deep-down durable beauty that inspires class cooperation and efficiency.

SEND FOR NEW *COPPES NAPANEE* SCHOOL EQUIPMENT DATA FILE

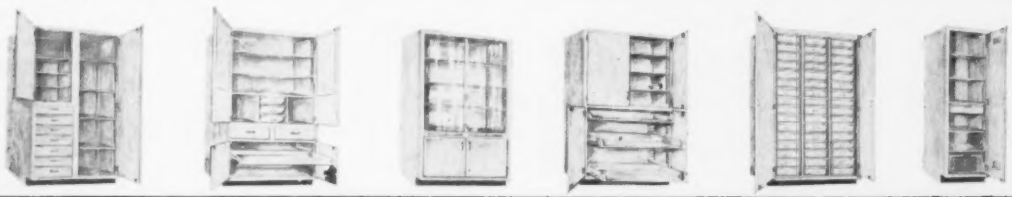
A pictorial inventory of the extensive **Coppes Napanee** line—complete with working specifications. Categorized for easy reference. Write for copy to dept. NS.

COPPES NAPANEE

Since 1876

COPPES, INC., NAPPANEE, IND.

Celebrating 80 Years of Fine Furniture Craftsmanship





NEW WAYNE *SUPERAMIC*

The look of the future in school transportation . . . the new Wayne Superamic School Coach . . . engineered and *visioneered* for passenger protection. Huge Superamic wrap-around windshield (53% larger than ordinary) with Low-Dip Corners . . . Visiports for lower angle vision at front corners . . . largest driver's window . . . widest front . . . overhead enclosed door controls . . . Ram-Jet Air Intakes on front for better ventilation . . . dual defrosting . . . pace-setting interior styling . . . strongest, heaviest frame and paneling, etc. Contact your Wayne Distributor now or write to WAYNE WORKS, INC., RICHMOND, INDIANA, U. S. A.

Wayne

TREND-MAKER OF THE SCHOOL COACHES

Schools look

. . . for Sound Systems adaptable to any size school, any school activity!



Schools take on a new look in efficiency and adaptability with the installation of an RCA Sound System. Activities mesh in smoother rhythm; closer contact is established between administrators, teachers and pupils.

Designed especially for school and classroom use, the new RCA Sound Console contains all the necessary equipment for streamlining your school communications requirements. Complete accessibility to all classrooms, singly or in combination, rests at your fingertips. A convenient "all call" provides instant coverage of the entire school. Included are provisions for AM-FM radio, and three-speed phonographs. RCA Sound will add new efficiency and versatility to your school.

Choose RCA Sound, too, for the comfort and security that come from knowing RCA Engineered Sound Distributors everywhere are equipped by training and facilities to render emergency aid quickly and efficiently. RCA Sound is backed also by the nationwide resources of the RCA Service Company. If you'd like more information in convenient brochure form on why schools look to RCA for Sound, just clip and mail the coupon above.

Radio Corporation of America
Department C-2, Building 2-3
Camden, New Jersey

Please send me the complete story on

☐ RCA 400 Projectors
☐ RCA Sound System for Schools

NAME _____ TITLE _____
SCHOOL _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

to RCA

. . . for Sound Projectors even a novice can operate in 30 seconds!

RCA has taken the mystery out of 16mm projector operation. In today's schools equipped with RCA Projectors, inexperienced teachers and pupils become confident projectionists in a very short time. It's easy to get the show going when your projector is an RCA—you set it up in a jiffy, quickly guide the film through the thread-easy path, flip a switch and you have sparkling pictures on the screen *in less than a minute.* Even the younger pupils will vie for the job as "chief operator!"

You will appreciate, too, the ruggedness of RCA equipment. No need to "baby" the RCA Projector—it's built to perform smoothly and quietly with minimum maintenance over a long life. Even after years of hard usage, crisp picture and sound quality scarcely diminish. The single case RCA Projector, the Junior, is a marvel of compact motion picture efficiency. For a speaker in a separate case, ask for the Senior—it provides more sound power for bigger auditoriums.

Your RCA Audio-Visual Dealer will be glad to show you why more schools look to RCA for their projection needs—or for further details in colorful brochure form, use the convenient coupon.



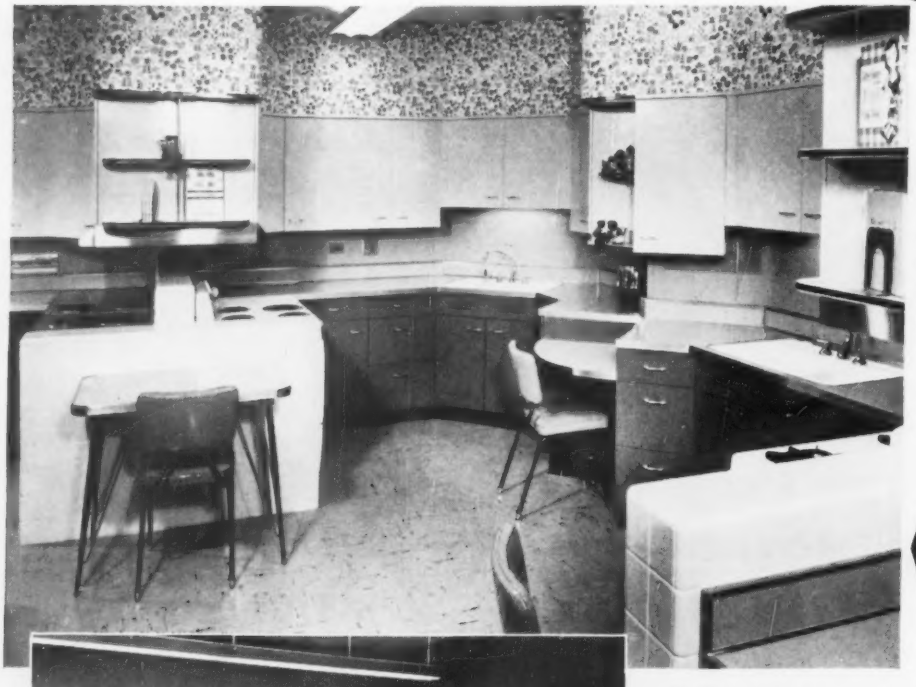
RCA®

EDUCATIONAL SERVICES

RADIO CORPORATION of AMERICA

CAMDEN, N. J.

Compact Planning characterizes unique school installation by *St. Charles*



WASHINGTON JUNIOR HIGH SCHOOL, NAPERVILLE, ILLINOIS SELECTS UNITS BY ST. CHARLES, CUSTOM-BUILT OF STEEL, FOR ITS NEW HOME ECONOMICS LABORATORIES

Home-unit kitchens, arranged in space-saving cluster, provide maximum convenience in minimum area.



Clothing construction units provide machine and work surfaces, on same level, for group instruction. Storage space in sewing center multiplied by full-height storage wall, incorporating tote tray, wardrobe, ironing board units and general storage.

Skilled planning was the key to St. Charles success in solving the problem presented by this school's needs. The demands made by continually increasing registration upon the modest area available for cooking and sewing classrooms required the careful application of St. Charles wealth of experience.

As a recognized leader in the practical planning and custom construction of home and institutional facilities, St. Charles was well equipped to meet these demands. Their suggested floor plan, permitting accommodation of maximum class groups, in uncluttered, homelike surroundings, is proving highly practical and wholly satisfactory in actual operation. We would appreciate an opportunity to advise with you on your problems in home economics equipment, from initial layout through final installation. Write for complete details.



"EDUCATION FOR LIVING"

Send for your free copy of "Education for Living," a recently published study of St. Charles products and their application to the homemaking classroom. Write

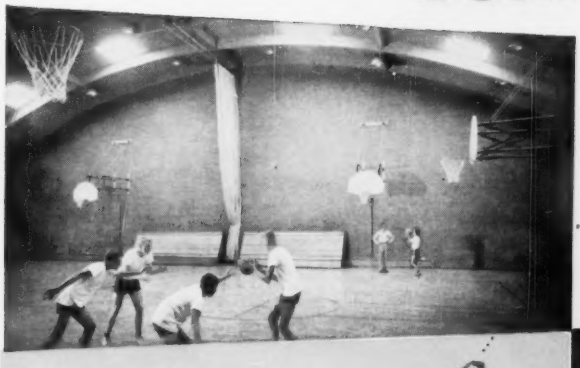
St. Charles **CUSTOM EQUIPMENT**

For the homemaking classroom • For the home kitchen

ST. CHARLES MANUFACTURING CO., 1615 E. Main St., St. Charles, Illinois

all set for high scores
in classes and sports with

Guth school lighting



Baseline Jr. High School
Boulder, Colo.

GYM: Guth Gym Lights
(high bay and low bay)

CLASSROOMS: GuthLite, Jr.®







They wanted the best of everything for the students at Baseline Junior High. They chose Guth Lighting for every room from library to gym.
What a sight for young eyes!

Guth-Light helps make school days happy days—more "A's"—more baskets! Less fatigue from eyestrain—a brighter future with normal vision protected.

Study or play—it's all fun for the pupils at Baseline!

Write for detailed information on Guth School Lighting today.



Guth — Leaders in Lighting Since 1902

THE EDWIN F. GUTH COMPANY • ST. LOUIS 3, MO.



COOLITE GLASS GETS ITS COLLEGE DEGREES



Architect:	Mitchell & Ritchey
General Contractor:	George H. Chilli
Glazing Contractor:	Pittsburgh Plate Glass Company

Solar Heat and Glare Held to Minimum by Mississippi Glass in University Dormitory

Donner Hall, Carnegie Institute of Technology's new men's dormitory will be bright with daylighting without the unnecessary discomfort of excess solar heat. In keeping with modern architectural trends, this outstanding structure will feature extensive use of large areas of ¼" Mississippi Coolite, Heat Absorbing, Glare Reducing glass in both front and rear elevations. Under this excellent arrangement all rooms will be flooded with copious quantities of softly diffused, glare reduced daylight for maximum seeing comfort. The rooms will seem larger, more restful, more cheerful.

With its cool, blue color, translucent, light diffusing Coolite glass compliments the modern design of the building, and Coolite will help keep interior temperatures comfortable by absorbing up to 50% of solar heat rays. Students will see better, feel better, work better in the atmosphere created by Coolite-conditioned natural lighting.

When you build or remodel your school buildings, make better daylighting a part of your plans. Specify glass by Mississippi. Available in a wide range of patterns and surface finishes to meet any lighting need within any school budget.



Write today
for Free Literature.
Address Dept. 15.

Mississippi constantly tests daylighting applications of its glass in a schoolroom erected on factory grounds. Results of these tests and assistance of Mississippi technicians are available to you upon request without charge.

MISSISSIPPI
GLASS COMPANY
88 Angelica St. • St. Louis 7, Mo.
NEW YORK • CHICAGO • FULLERTON, CALIFORNIA

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

first

. . . in
proven *design*!
consistent *quality*!
mass-production *economy*!



Educators

HARDWOOD

CLASSROOM CABINETS

FOR EVERY STORAGE NEED

Yes . . . in DESIGN, QUALITY, ECONOMY, Educators classroom cabinets are front-page news in the school field! Educators offers 41 DIFFERENT CABINET UNITS to meet EVERY classroom storage need! . . . mobile units . . . storage and wardrobe cases . . . fixed counter assemblies (just a few are shown above)!

Construction permits easy transfer from one room to another . . . a major consideration with today's rapidly changing needs!

In addition to their primary function, Educators movable cabinets are real teaching aids. Caster-mounted units become work tables . . . serve as space dividers . . . make it simple to set up "activity areas"! Best of all, mass production offers the two basic advantages every school administrator wants — CONSISTENT QUALITY and LOW COST!

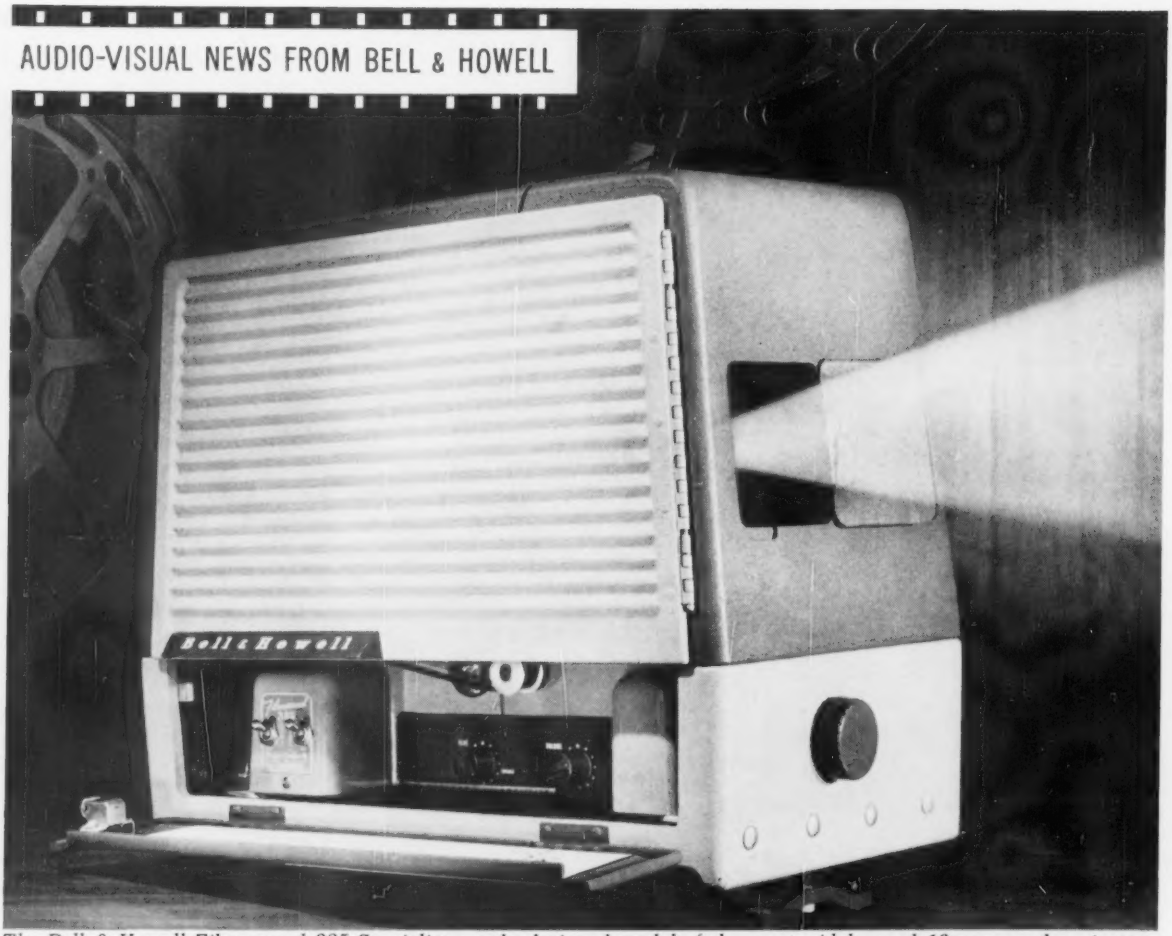
Add it all up . . . UTILITY . . . QUALITY . . . COST . . . and the answer is EDUCATORS, TODAY'S PACE-SETTER IN CLASSROOM CABINETS!

Write Today for complete catalog and/or name of Educators dealer in your area.
Address:
EDUCATORS MANUFACTURING CO.

Dept. NS
Main Office: 721 E. 25th St., Tacoma, Washington
Dealers throughout the United States

● For detailed information on Educators Classroom Cabinets, consult the current editions of American School & University or Sweet's Catalog.

AUDIO-VISUAL NEWS FROM BELL & HOWELL



The Bell & Howell Filmosound 385 Specialist, newly designed model of the most widely used 16mm sound projector.

GREAT NEW TEACHING TOOL



ENCYCLOPAEDIA BRITANNICA FILM

"Films bring quick understanding to slow readers," says Mr. Rosenquist. "Sound movies broaden the experience of all students in science, industrial arts and social subjects. And important to us, the rugged Filmosound makes classroom projection simple, reliable and foolproof."

How Filmosound helps High School students learn faster, retain more

Enrollment is nearing 3,200 at Maine Township High School, suburban Chicago. Audio-visual director Wayne I. Rosenquist reports: "We find that sound movies sharpen students' learning power and improve their retention. Dependable Filmosound Specialists help us maintain high standards of instruction."

Now this great teaching tool is improved again: increased amplifier output (*double* power under normal conditions, *four times* stronger at low voltage), sound insulated aluminum doors, an end to warm-up delay . . . plus jewelled film-handling parts that last 400% longer, all-gear drive, straight-line optics, still picture clutch and reverse.

See the new Filmosound 385 Specialist in action soon. Ask your Bell & Howell Audio-Visual Dealer for a personal demonstration or write for free brochure. Bell & Howell, 7155 McCormick Road, Chicago 45, Illinois.

FINER PRODUCTS THROUGH IMAGINATION **Bell & Howell**

Superior for '56



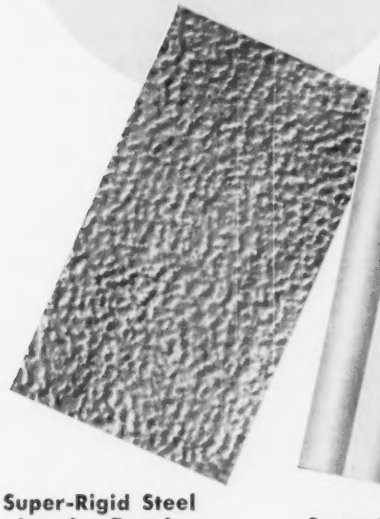
with
SUPER-RIGID
and
SUPER-KOTE
STEELS

Additional safety, lower maintenance, greater beauty, longer bus life . . . these are the significant benefits inherent in the group of new, specially-processed steels featured on your 1956 Superior Coach.

Steel is basic to the construction of *any* school bus. But Superior, in its constant effort to improve school bus safety standards, has gone beyond conventional use of body steels. Superior makes *maximum* use of steel. Special steel processing, improved construction methods, and the finest materials all go into the bus that is in every respect . . . safer by design and safer for your children. Superior Coach Corporation, Lima, Ohio.

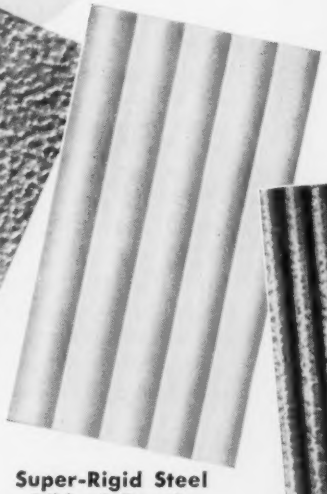
SUPERIOR COACHES

Superior...
safer by design



Super-Rigid Steel Interior Panels

. . . ***stucco-rolled for greater durability, more beauty, less maintenance.*** Exclusive stucco-rolled pattern resists scuffs and scratches, greatly reduces maintenance costs common to smooth panels, improves appearance of coach interior. Standard on top, sides and rear interior of your Superior Coach.



Super-Rigid Steel Ribbed Panels

. . . ***deep ribbed for greater impact resistance.*** Deep, full ribs give these inside and outside wall panels much greater strength and impact resistance than that of flat panels used on ordinary buses. Employs same design principle as panels used on commercial buses, trains, airplanes and other modern vehicles. Ribbed panels extend from seat line to windows inside, windows to floor line outside.



Super-Rigid Steel Seat Backs

. . . ***ribbed for strength, scratch resistance.*** Fine rib pattern adds structural strength to passenger seat, resists scars and scratches far better than smooth seat backs.



. . . ***zinc coated for rust resistance.*** A full year's use has proven Super-Kote Steel to be far more rust resistant than any other bus body steel. It's zinc coated to resist rust, bonderized to grip paint, specially Epon primed and heavily enameled to retain new-bus appearance.

How new heating and ventilating system



Dunham VARI-AIR Unit, concealed in mixing flue behind blackboard, mixes fresh and recirculated air—silently diffuses it to classroom through overhead grille.

Dunham VARI-AIR designed to help the "hard pressed" budget... and save valuable floor space

SCHOOL construction costs can't go anywhere but down when Dunham VARI-AIR heats and ventilates classrooms. This new and simple system satisfies all health and comfort standards . . . does it at a cost that meets with the full approval of any school board member.

In addition to healthful and silent heating and ventilating, VARI-AIR puts school air conditioning within easy financial reach of school construction budgets . . . should it be desired. This optional use of VARI-AIR can be economically provided for at the time the system is installed.

Offers Numerous Advantages

Lower Costs: Dunham VARI-AIR eliminates need for in-the-room cabinet ventilators . . . provides greater savings in classroom heating construction costs. Total absence of complex controls saves both first and maintenance costs.

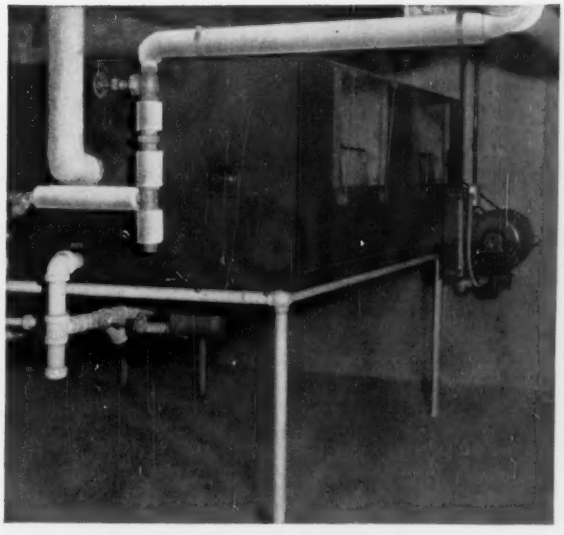
Minimum Temperature Variations: Dunham's centralized temperature control system holds room temperatures within prescribed limits by automatically compensating for weather change and heat loss.

Space Saver: No floor space in classroom is given over to either heating or ventilating with a Dunham VARI-AIR system.

cuts schoolroom construction costs



Dunham Finned-Pipe Radiation runs along outside walls, under windows to eliminate chilling downdrafts, save premium classroom floor space.



Dunham Heating and Ventilating Unit pulls in outside fresh air and tempers, filters and discharges it through a tunnel or ceiling plenum to VARI-AIR Units.

How VARI-AIR Operates

Only three primary parts to the system. VARI-AIR Units are concealed in wall space, mix fresh and recirculated air and diffuse it into classrooms.

Heating and Ventilating Unit—generally one to the entire system—pulls in fresh outside air, tempers, filters and discharges it through a tunnel or ceiling plenum to the VARI-AIR Unit.

Radiation — Dunham THERMO VECTOR® "along-the-wall" radiation saves floor space and provides all necessary heat whether used with steam or hot water.

For complete information, contact any Dunham Representative or mail the coupon.



Dunham VARI-VAC® Temperature Controls provide centralized, one-man operating station for *all* system settings and remote control readings. This electronic "brain" enables system to save up to 40% on fuel.

DUNHAM®

HEATING & COOLING EQUIPMENT

RADIATION • CONTROLS • UNIT HEATERS • PUMPS • SPECIALTIES

C. A. DUNHAM COMPANY • CHICAGO • TORONTO • LONDON

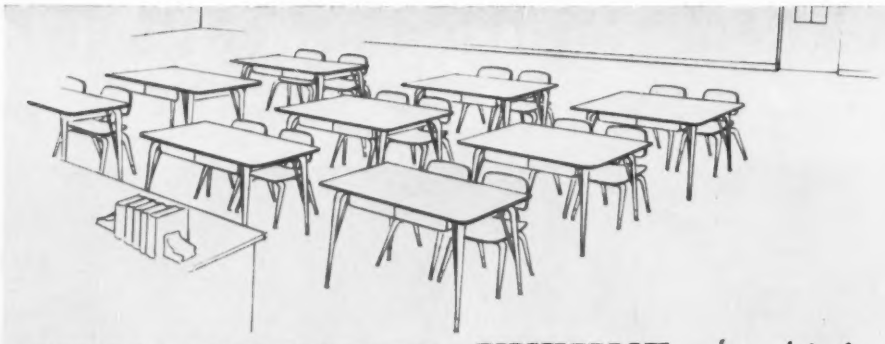
C. A. DUNHAM COMPANY
Dept. NS-3, 400 W. Madison Street
Chicago 6, Illinois
Please send VARI-AIR literature.

Name_____

Company_____

Address_____

City_____ Zone____ State_____



SCHOOL FURNITURE BY KUEHNE ... beautiful, sturdy, efficient!

(SAY "KEE-NEE")

Trim and graceful of line, colorful and completely practical in function . . . ruggedly, faultlessly fabricated and finished to resist for years the abuse of daily use . . . posture-perfect for comfort all day without strain or stress . . . and priced to yield the ultimate in service for every dollar invested.

Thirty-three years of experience is built into Kuehne classroom furniture—experience that has produced unequalled value in beautiful styling, in efficient design, in durable construction.

Write for literature



STACKING CHAIR

Contoured 5-ply maple back and seat impregnated with moisture-resistant resin. Legs: 1¼" tubular steel tapered to ferrule-type stainless steel rubber-cushioned glides. Eight heights: 11" to 18". Frames: choice of 3 colors and Satin Chrome. Seats and backs available in 4 colors and natural maple.



RECTANGULAR TABLE

. . . with optional book storage shelf, as shown, can be used as a two-student desk. Frame is 1¼" steel tubing with legs tapered to fit ferrule-type, self-leveling rubber-cushioned glides. Top, 24"x48", is General Electric mar-resistant Textolite, reinforced to double thickness around edges. Complete range of sizes in five heights. Choice of 3 colors or Satin Chrome.

Two Kuehne Exclusives!



SELF-LEVELING GLIDES

Stainless steel, rubber-cushioned. Always stay level; won't mar floors; completely interchangeable.



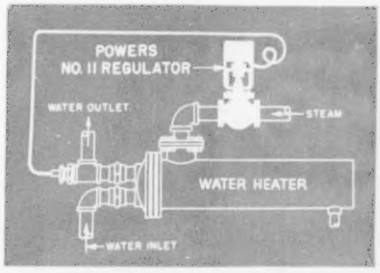
REINFORCED TOPS

All Kuehne desks and tables are reinforced to double thickness (26 ply) around edges to insure true straightness and to prevent warping.

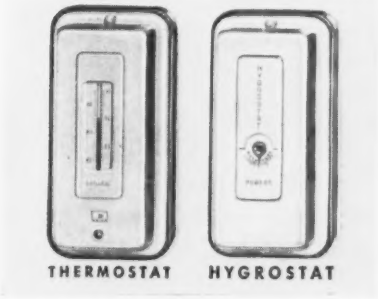
KUEHNE MANUFACTURING CO. • MATTOON, ILLINOIS

World's Largest Manufacturer of Tubular Furniture

DISTRIBUTORS: Some excellent territories still open. Write!



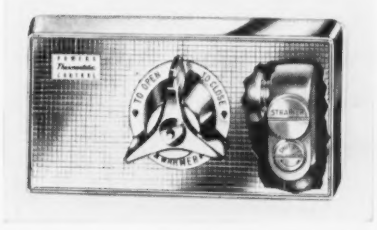
Comfortable Water Temperature in Swimming Pools is obtained with Powers thermostatic Regulators for water heaters. *Fuel Economy* also results from eliminating OVER-heated water.



Comfortable Air Temperature in Pool Area and Locker Room is assured with Powers control of temperature, humidity and proper ventilation.



POWERS DOUBLE SAFE Showers also provide utmost comfort. Shower temperature remains constant wherever bather sets it... regardless of *temperature* or *pressure* changes in water lines. Safe-Limit prevents flow of water above 110°.



Powers New HYDROGUARD has double duty Strainer-Check-Stops concealed beneath its cover. They simplify piping and tile work and improve appearance. Only ONE dial to turn instead of usual two or more valves. (c46r)



in Swimming Pools, Locker Rooms and Showers

Specify and Install **POWERS THERMOSTATIC CONTROL**

In the world's largest indoor swimming pool at Great Lakes Naval Training Station and in thousands of other famous pools from coast to coast, Powers control provides water and atmospheric comfort.

Quality Controls and Nationwide Service plus more than 60 years of know how in the proper application of a complete line of products... are important advantages offered by Powers.

Only a few of our many controls are shown here. Others are available for whirlpool arm and leg baths and many other types of hydrotherapy.

Consult Powers on Thermostatic Control for swimming pools, locker rooms and showers. An experienced engineer in Powers nearest office will gladly help you select the right type of control for your requirements.

THE POWERS REGULATOR COMPANY

SKOKIE, ILLINOIS | *Offices in chief cities in U.S.A., Canada and Mexico*

Over 60 years of Automatic Temperature and Humidity Control

HERRICK STAINLESS STEEL* REFRIGERATORS

Unmatched for Dependable Performance

Highest quality materials and fine craftsmanship combine to make HERRICK Refrigerators completely dependable. Low cost, year-after-year performance is assured, as are rugged durability and maximum convenience. Write for the name of your nearest HERRICK supplier. He is ready to serve you.

*Also available with white enamel finish.



They both agree . . . HERRICK trouble-free performance is tops.

HERE'S WHY:

- **Oversize Cooling Coil** — Provides correct temperature and humidity. Assures faster recovery and uniform temperatures throughout the refrigerator for superior results.
- **Heavy-Duty Condensing Unit**—Properly balanced with cooling coil for maximum life and service.
- **Large Compressor Compartment**—Contains sufficient ventilation openings to give best condenser cooling.
- **Super-Efficient Insulation**—Semi-rigid Fiberglas 2½ lb. density, 3" thick in walls, 3⅝" thick in doors.

...plus many other HERRICK Extra-Value Features. Ask about them.



HERRICK Model TSS66
Top-Mounted Reach-In

HERRICK manufactures a complete line of:



Reach-In Refrigerators



Commercial Freezers



Walk-In Coolers

HERRICK REFRIGERATOR COMPANY • Waterloo, Iowa
Dept. N., Commercial Refrigeration Division

Typical Installations

HERRICK Refrigerators are Performance-Proved at:

Notre Dame High Schools for Boys
Niles, Illinois
Tulsa Public Schools
Tulsa, Oklahoma
Waco Public Schools
Waco, Texas
Henrico County Schools
Richmond, Virginia
Don Bosco Technical High School
San Gabriel, Calif.
Iowa State College
Ames, Iowa
University of Mississippi
Jackson, Miss.



"The tiled walls and floors save us hours each week in clean-up time," reports the manager of this kitchen.

Less time for clean-up . . . lowest cost for maintenance

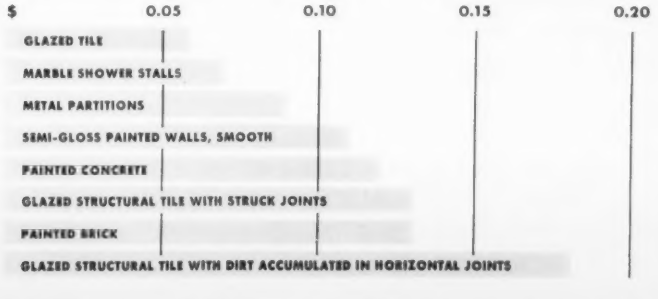
School management, faced with increased enrollment and restricted budgets, insists upon speedy and economical maintenance. American-Olean Ceramic Tile meets these requirements, giving low-cost upkeep and providing outstandingly attractive appearance at the same time.

For better looks, easier sanitation, and long-term economy, specify American-Olean Tile. It's cheapest, by far, in the long run!

TILE SPECIFICATIONS: Color Plate 317. Ceiling and Upper Walls: 11 Ivory. Lower Wall: 21 Cornflower. Strip: R162-C201. Base: 92 Larkspur. Floor: Brickpoint Diagonal Check C.E.—Slate, Azure, and Sand Gray Textone.

The chart below shows the relative costs of cleaning a square yard of surface, based on an hourly wage of $1.47, as reported by the magazine "Modern Sanitation." It proves that *ceramic tile costs less to maintain than any other quality material!*

COST OF CLEANING A SQUARE YARD OF SURFACE



American-Olean Tile Company

Executive Offices: Lansdale, Pennsylvania

Please turn the page ⟩



Boys can be boys . . . and no harm done

Mopping up the mess that moppets make can be a pretty troublesome problem in locker and shower rooms. And when the moppets grow up into halfbacks, their football cleats (or baseball spikes) can cause more permanent damage.

To solve both problems, American-Olean Tile is a wise and natural choice. Only ceramic tile can stand so much rough treatment so cheerfully. Strong disinfectants will not harm it. It keeps its beauty for the life of your building—no repainting, no refinishing, no waxing or polishing!

TILE SPECIFICATIONS: Color Plate 334. Locker Room, Frederick Douglass Stubbs School, Wilmington, Del. Victorine and Samuel Homsey, Architects. Walls: 12 Buttercup. Floor: Single Tile Check, Blue Granite and Gray Granite.

NEW FREE BOOKLET *offers ideas and suggestions for school planning.* BOOKLET 600, "Tile for Schools," contains color photographs of a wide range of actual tile installations. It gives you practical ideas which can be adapted to fit your own plans, whether you are remodeling or considering a new building. Send for it today!

AMERICAN-OLEAN TILE COMPANY
1196 Cannon Avenue, Lansdale, Pennsylvania

Please send me, without obligation, your Booklet 600, "Tile for Schools."

Name_____
(Please Print)

Title_____

School_____

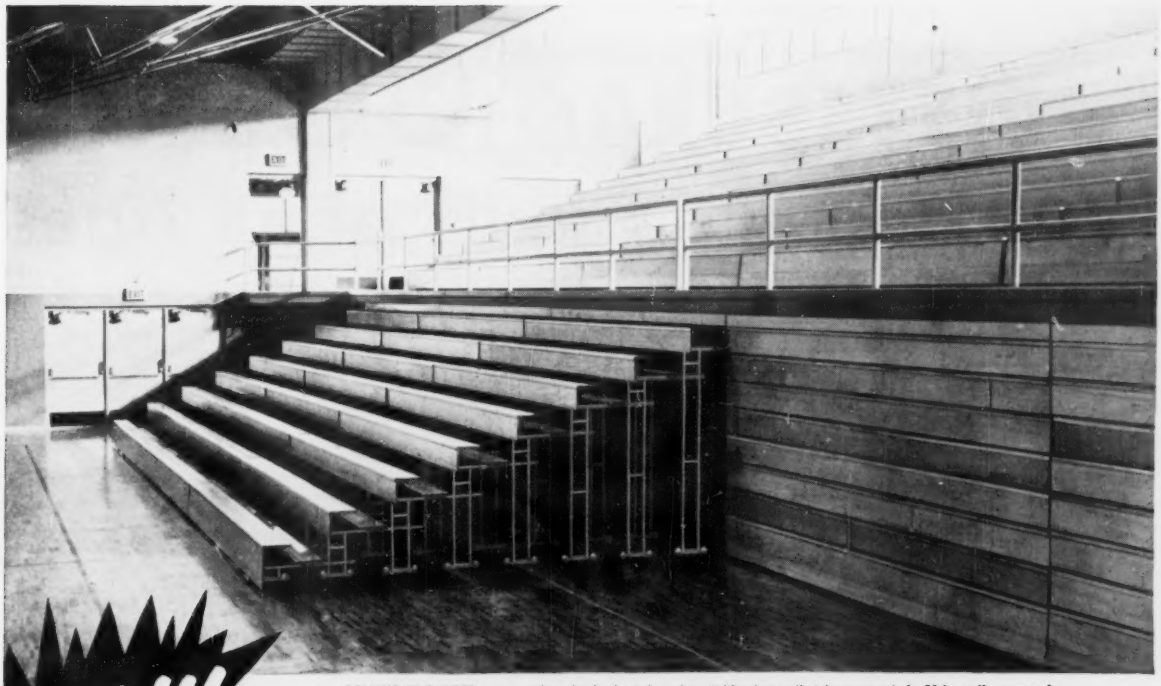
Address_____

City_____ Zone_____ State_____

American-Olean Tile Company

Executive Offices: Lansdale, Pennsylvania
Factories: Lansdale, Pennsylvania • Olean, New York
Member, Tile Council of America

GLAZED STRUCTURAL TILE WITH DIRT ACCUMULATED IN HORIZONTAL JOINTS



ROLLING ON RUBBER, non-marking wheels, the Safway-Leavitt bleacher easily telescopes out of a 38-in. wall recess and locks open. Rigidly trussed, the bleacher supports a live load of 120 lbs. per linear foot. Built of high carbon tubular steel in 16-ft. long sections, the bleacher has a rise-per-row of 9½ in.—providing superior visibility, comfort and safety.

NOW

SAFWAY ANSWERS *ALL* SEATING NEEDS

with Telescoping • Portable • Permanent Steel Bleachers



LOW-COST PORTABLE SEATING anywhere—the "Budget Master" is made of durable angular steel in convenient 6-ft. sections, five or ten rows high. Maximum safety at minimum cost with easy portability makes the "Budget Master" ideal for your smaller spectator events.



PERMANENT OR PORTABLE, Safway stadium seating is custom designed to your bleacher requirements. Engineered to combine easy erection with the ultimate in safety and durability, the Safway bleacher provides individual seating as spacious as a household chair.

Line Is Completed by Adding Leavitt Telescoping Bleacher

SAFE, COMFORTABLE SEATING for *every* spectator event is yours in one quality line—SAFWAY. By acquiring the fine Leavitt telescoping bleacher, SAFWAY completes its service to satisfy all your bleacher needs—whatever they may be.

With SAFWAY engineering, the telescoping bleacher is better than ever for inside roll-away installations. For *either* outdoor or inside use, the portable "Budget Master" gives you safe, low-cost patron comfort with wide adaptability. For larger crowds, SAFWAY sectional bleachers and grandstands give your spectators maximum visibility with utmost comfort and complete safety.

SAFWAY never compromises with quality. Highest design and production standards assure the finest seating possible, consistent with reasonable cost. Now with Leavitt telescoping bleachers, SAFWAY's quality line is expanded to give you even greater service.

WRITE FOR FREE BULLETIN 32

There is no substitute for SAFETY
. . . there is no substitute for SAFWAY

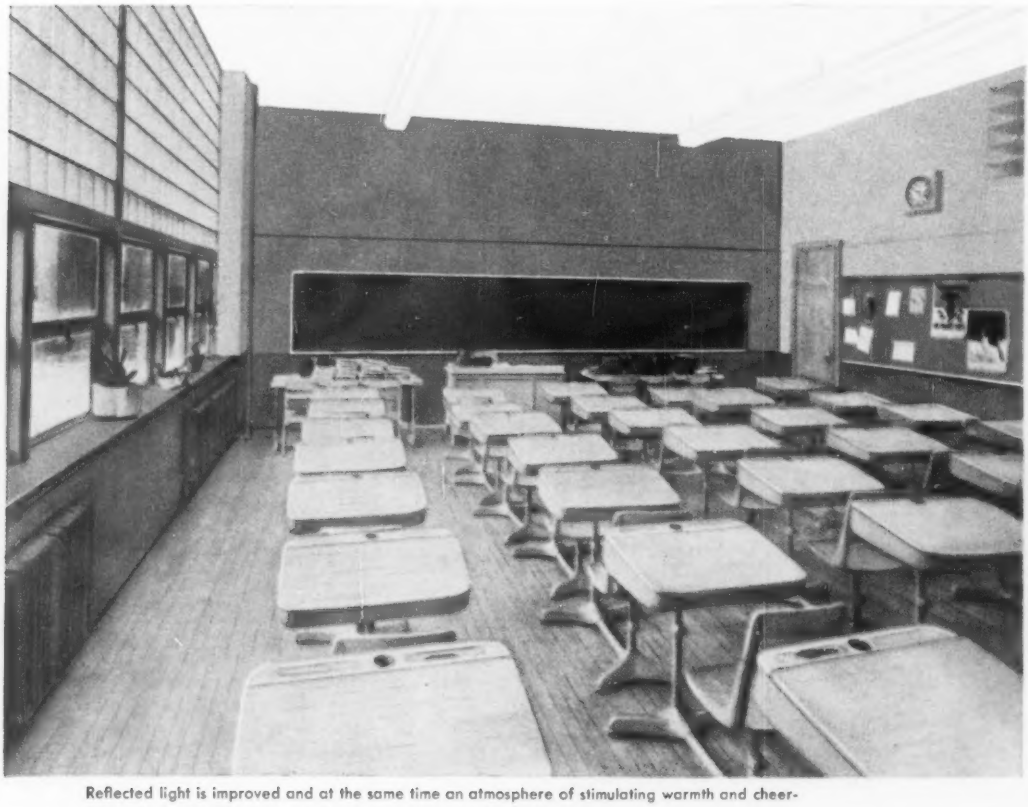
SAFWAY
STEEL PRODUCTS, INC.
6233 W. State St., Milwaukee 13, Wis.

City_____ Zone_____ State_____

Member, The Council of America

PITTSBURGH COLOR

Benefits Pupils of all Ages!



Reflected light is improved and at the same time an atmosphere of stimulating warmth and cheerfulness is provided by the use of more than one color in this classroom.

"COLOR DYNAMICS" is best and most economical painting method!" says school superintendent.

"The bright, pleasing colors have made a remarkable difference in the amount of light in our classrooms. This is quite important to the study and work habits of our pupils and teachers. Patrons and visitors frequently compliment us on the pleasant changes COLOR DYNAMICS has effected. We have found this color plan as well as Pittsburgh Paints to be not only the best but also the most economical. Our experience has been so satisfactory we plan to continue this program in our school system."

MILTON GARRISON, *Supt.*
Center Public Schools,
Kansas City, Missouri.

EXPERIENCE of educators in hundreds of schools and colleges has demonstrated that Pittsburgh COLOR DYNAMICS improves the academic grades and behavior ratings of students of all ages.

Most convincing evidence that color environment affects work and study habits is the intensive two-year study of the record of more than 2,500 pupils in Baltimore schools. This test reveals that learning is accelerated and behavior is improved in schools painted according to the modern principles of COLOR DYNAMICS.

By painting school rooms with COLOR DYNAMICS you give them color arrangements in keeping with their design and their lighting. You also take into consideration the ages of the pupils who use these rooms and the work they do. You paint sunny effects into gloomy rooms and corridors. You bring cool relief into rooms that face the bright afternoon sun. Cold, unfriendly rooms appear cheerful and

PPG PITTSBURGH
PAINTS • GLASS • CHEMICALS • BRUSHES
PITTSBURGH PLATE

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

DYNAMICS®

Experience in hundreds of schools and colleges is convincing proof that planned color environment improves work and study habits.



In this vocational classroom, an industrial area has been simulated. Machines, walls and ceilings have been painted with eye-rest colors that also provide bright and cheerful surroundings.

inviting. Small, stuffy rooms are made to seem spacious and airy.

By such purposeful use of color you can lessen eye strain and stimulate concentration. You can give your pupils more cheerful surroundings. The pride they'll take in their improved environment will often simplify housekeeping problems and discourage vandalism.

Why not try COLOR DYNAMICS next time you paint—and see the difference it makes in performance and behavior traits.

PAINTS
PLASTICS • FIBER GLASS
GLASS COMPANY

Only a few of the Many Schools Painted the COLOR DYNAMICS Way!

MacAlister College, St. Paul, Minn.
Ball State Teachers' College, Muncie, Ind.
Georgia Teachers' College, Savannah, Ga.
Hendrix College, Little Rock, Ark.
Monessen High School, Monessen, Pa.
Monte Vista High School, Monte Vista, Colo.
Midway High School, Washington, Pa.
Snyder High School, Snyder, Tex.
Durand, School, Pt. Pleasant, N.Y.
St. Johnsville Central School, Utica, N.Y.
Anthony Elementary School, Anthony, N.M.
Kent Elementary School, Kent, Ohio

Let us make a FREE Engineered Color Study of Your School

We'll be glad to send you our profusely illustrated book containing scores of suggestions how to use COLOR DYNAMICS in school painting. Or we'll be glad to make an engineered color study of your school, or any part of it, without cost or obligation. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our representatives see you at your convenience. Or mail this coupon.



Pittsburgh Plate Glass Co.,
Paint Div. Dept. NS-36,
Pittsburgh 22, Pa.

☐ Please send me a FREE copy of your booklet "Color Dynamics for Grade Schools, High Schools and Colleges."

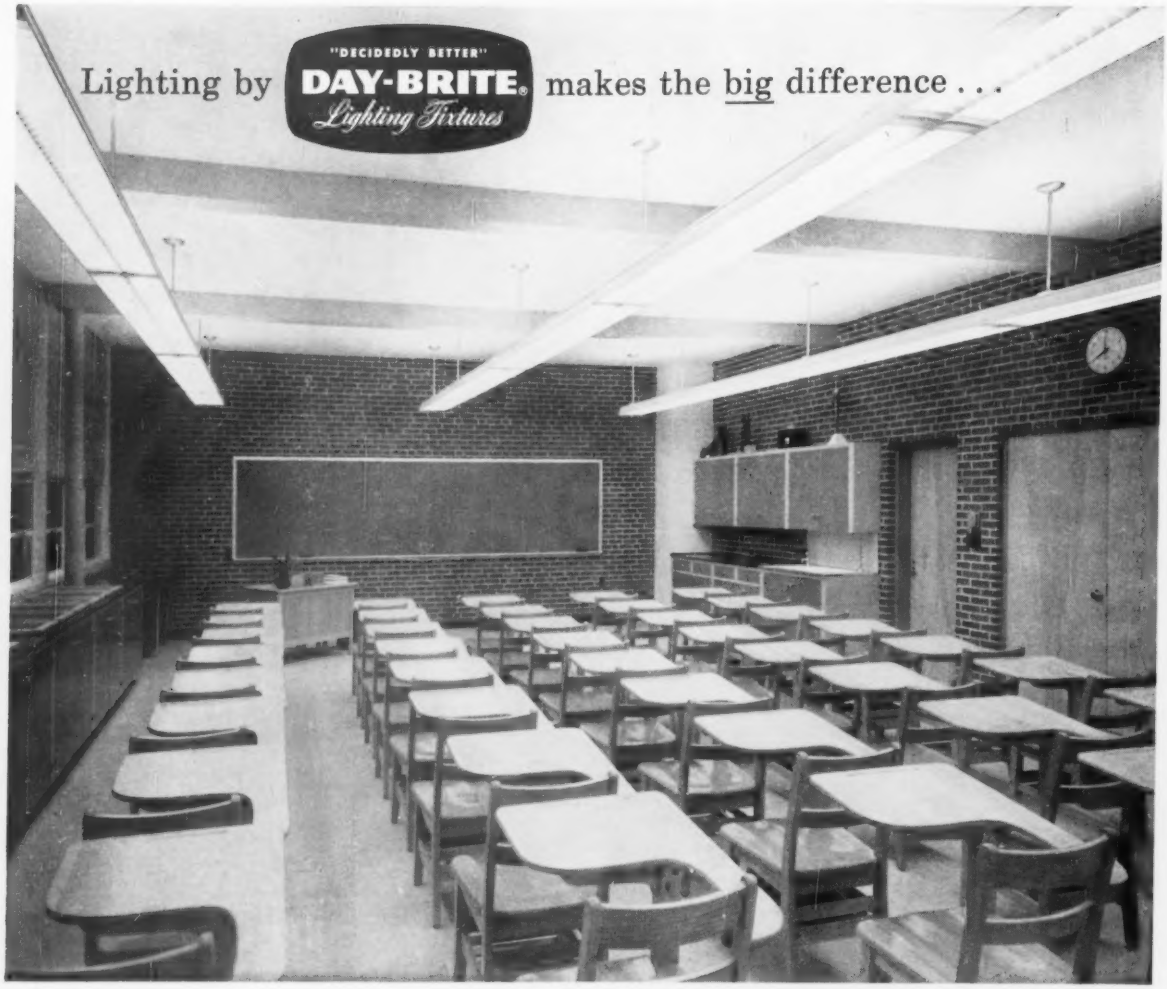
☐ Please have representative call for Color Dynamics Survey without obligation on our part.

*Name*_____

*Street*_____

*City*_____

*County*_____ *State*_____



Day-Brite LUVEX® school-lighting fixtures installed in Concord City Schools, Concord, N. C.

Day-Brite school lighting takes the strain out of seeing

From one end of a schoolroom to the other—from desk tops to chalk boards—Day-Brite school lighting provides an over-all pattern of eye-comfort illumination. It makes the big difference in seeing and learning—benefits pupils and teachers alike.

Before you decide on any phase of school lighting or re-lighting, see, examine and compare the many Day-Brite advantages. Ask your Day-Brite representative to show you why more schools have installed more Day-Brite LUVEX school lighting fixtures than any other make. Look for him in your classified phone directory. Or, send for school-lighting literature.

Nation's largest manufacturer of commercial and industrial lighting equipment

"DECIDEDLY BETTER" DAY-BRITE Lighting Fixtures

6T124

Day-Brite Lighting, Inc.
5451 Bulwer Ave.
St. Louis 7, Missouri

In Canada: Amalgamated Electric Corp., Ltd., Toronto 6, Ontario

THE MARK OF QUALITY

BARBER COLMAN

uni-flo

ENGINEERED AIR DISTRIBUTION

ELECTRIC-ELECTRONIC

Automatic Controls

Developed at Wildwood Elementary School, West Allis, Wisconsin . . .

Important new answer to individual room comfort in modern daylight schools!



Learn the complete story! Find out how Barber-Colman engineers with background in both air distribution and temperature control combined skills with the consulting engineer and architect.* The resulting new indoor comfort system is applicable to buildings all over the country having extensive window areas . . . it may be exactly the answer you've been searching for. Phone your nearby Barber-Colman Office or write today!

* HOLLAND & BESEKE, *Consulting Engineers;* LINDL-SCHUTTE & ASSOCIATES, *Architects and Engineers,* West Allis, Wisconsin.

Come to ONE source . . . come to . . .

Barber-Colman Company

DEPT. C, 1653 ROCK ST., ROCKFORD, ILLINOIS, U. S. A.

Specialized

INTERNATIONAL SCHOOLMASTERS



can save you the BIG money!

Whatever your requirements for safe, economical transportation—whether 16 or 66 pupils—there is a specialized SCHOOLMASTER® that will save you the *BIG* money, the operating and maintenance money.

Every INTERNATIONAL is "all-truck" with no revamped passenger car engine or design compromises. This means that INTERNATIONAL SCHOOLMASTERS will give a longer lifetime of more constant service, less time off the job, fewer repair bills . . . to cut your school transportation costs year after year.

Get in touch with your INTERNATIONAL Dealer or Branch for complete information. Or write for the new School Bus Catalog to **Motor Truck Division, International Harvester Company, Chicago 1, Illinois.**

Tops in every class

Extra safety—with rugged all-truck design and specialized features that fully meet all national school bus safety standards.

Extra comfort—with every component constructed and balanced for quiet, easy riding qualities.

Extra long life—all-truck engineered, all-truck built for dependable performance that keeps costs lower, longer.

World's most complete line—6 completely *specialized* school bus chassis, 2 Metro® school busses on INTERNATIONAL chassis. Capacities from 16 to 66 pupils.

INTERNATIONAL® TRUCKS

All-Truck Built to save you the BIG money!

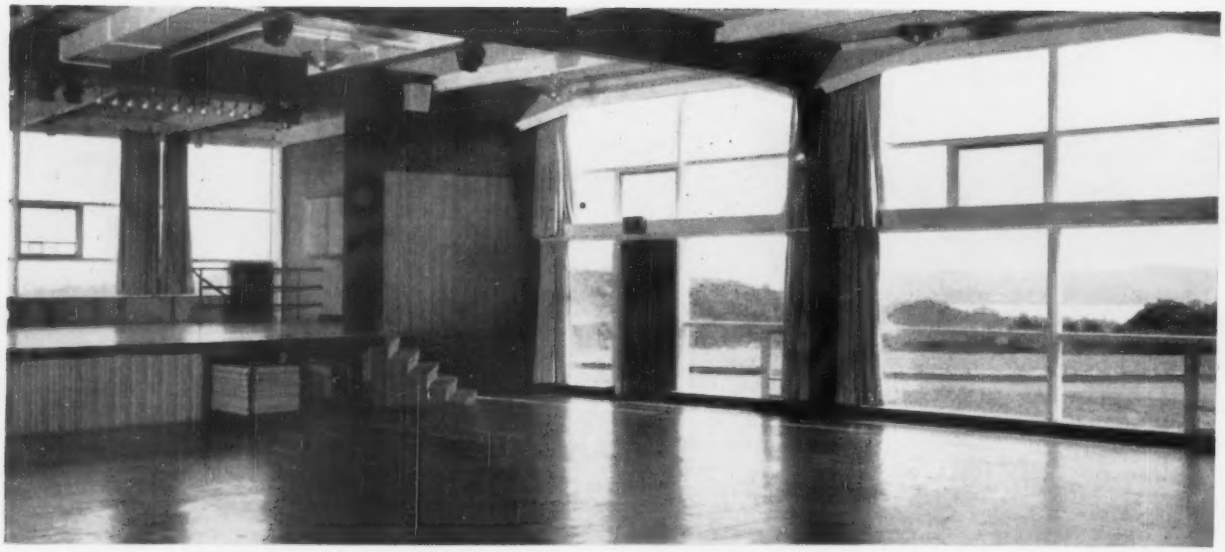
Motor Trucks • Crawler Tractors • Industrial Power • McCormick® Farm Equipment and Farmall® Tractors



Ask your maintenance man or janitor supply house for one of the many fine waxes on the market containing "Ludox" colloidal silica—Du Pont's anti-slip ingredient for *safer* floors.
E. I. DU PONT DE NEMOURS & CO. (INC.), GRASSELLI CHEMICALS DEPT., WILMINGTON 98, DELAWARE. *In Canada:* DU PONT COMPANY OF CANADA LIMITED, BOX 660, MONTREAL, P. Q.

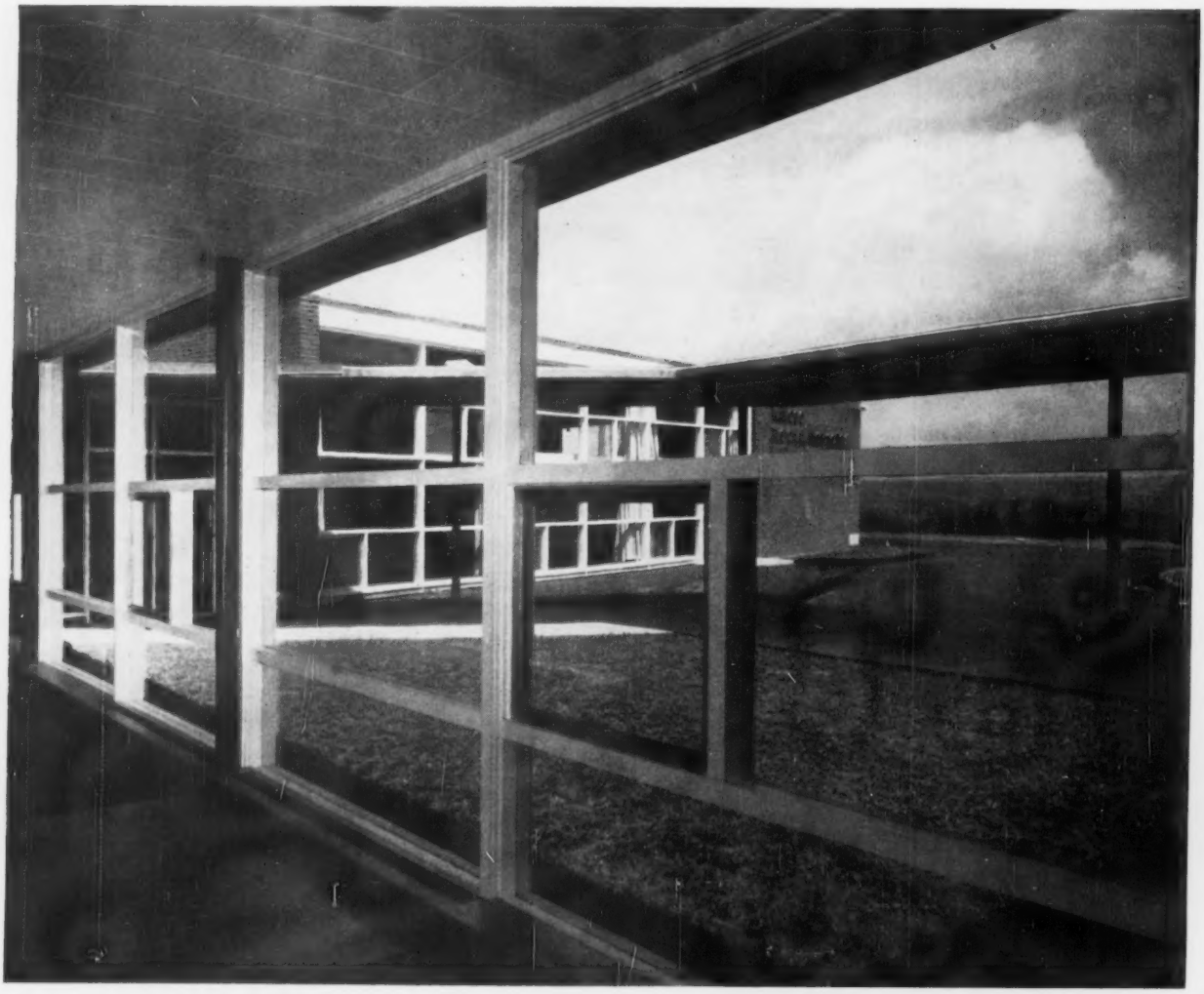
DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*



The gym. Bantam Lake is visible through the Herculite windows.

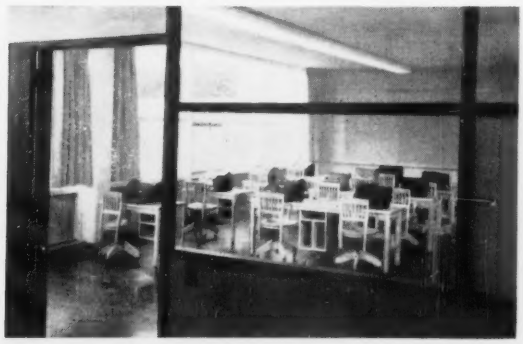
Looking out from front of school. Notice covered walkway to protect students while boarding buses.





Approaching the school, which serves the three towns of Warren, Morris and Goshen.
Architect: Nichols & Butterfield, West Hartford, Conn.

Pittsburgh Glass lets you SEE the view!



Typical classroom—bright and cheerful.

The Wamogo High School is right in the middle of a resort district, perched on the top of a 35 acre plot in the Berkshire Mountain foothills. It is surrounded by forest; and in the distance you can see the blue twinkle of Bantam Lake, the largest lake in Connecticut.

The architects said, "This is the finest site we've ever been offered to work with," and they proved it by using huge quantities of Pittsburgh Glass to bring that lovely view into the building. Every room is bright and cheerful. No student can ever complain about gloom, or dullness.

Classroom windows are glazed with Pennvernon heavy sheet glass. And in the gymnasium, good daylighting *and* safety were combined by using Herculite Plate Glass—heat treated and tempered to make it shock-resisting. Nucite® glass chalkboards were used throughout the school, and Pittsburgh Paints were dramatically applied in accordance with PPG's principles of Color Dynamics.

CONSULT YOUR ARCHITECT

for information about the use of these famous Pittsburgh Glasses in school construction.

Solex®
—heat-absorbing and glare-reducing plate glass

Herculite®
—shock-resisting tempered plate glass

Twindow®
—the world's finest insulating glass

Polished Plate Glass
—for clear, undistorted vision

Pennvernon® Window Glass
—window glass at its best

Design your schools better with

PITTSBURGH GLASS

PAINTS · GLASS · CHEMICALS · BRUSHES · PLASTICS · FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



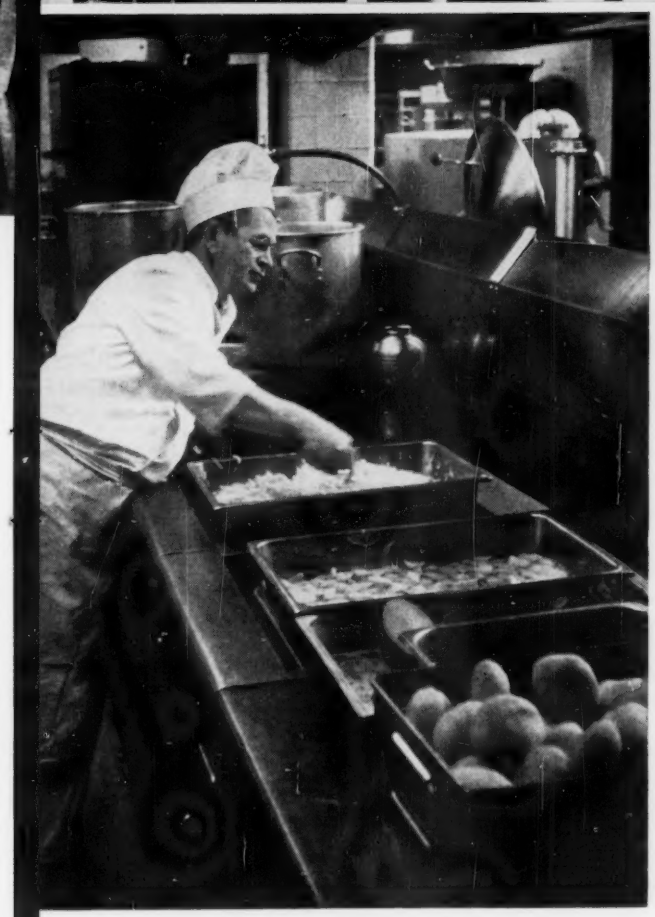
"ONLY *GAS* GIVES

THE EXACT TEMPERATURE WE NEED . . .

RIGHT WHEN WE NEED IT"

—Brandeis University, Boston





"We've used Gas for years, so we know it's dependable," say Steward Norman R. Grimm and Chef Gerald Beaton of Boston's new Brandeis University.

"With the large number of students and faculty we feed each meal, we need a fuel that'll help us put out good quality meals quickly. That's why we're glad we cook with Gas."

The Gas equipment in the three Brandeis kitchens and bake shop include 3 Garland ranges, 1 Garland broiler, 2 Garland fryers, 5 Magic Chef Ranges, 2 Magic Chef broilers, 2 Pitco fryers, a 4-deck Blodgett bake oven, a 3-deck Blodgett roast oven, 2 Groen steam kettles, a 3-compartment Market Forge steamer, a Vulcan baker, a Savory toaster, plus Gas hot plates, coffee urns, proofer and griddles.

Schools from coast to coast have found similar results with modern, efficient Gas kitchens. For information on any institutional food service problem, call your Gas Company commercial specialist and discuss the economies and results modern Gas equipment provides. *American Gas Association.*

QUIET PLEASE!

FORMICA AT WORK





In the hush of a school library the dignity of a Formica wood grain pattern or cheerful soft colors make sense esthetically. But the fact that worldly and versatile Formica was raised in restaurants and home kitchens is your assurance that Formica surfaces are well equipped to withstand the rigors of school-going America.

Formica's smooth easy-to-clean surface, its rugged resistance to scratching and abrasion, its complete indifference to boiling water, alcohol, and mild acids or alkalies makes it the ideal material for all school surfaces exposed to heavy use.

Student and teacher furniture, window stools, walls, cafeterias, laboratories, home economics kitchens, all offer Formica a chance to pay its way in reduced maintenance costs.

When refinishing, remodeling or building specify genuine Formica surfaces.



Old Desks Can Be Formica Surfaced Too!

It's a simple and inexpensive job to resurface worn rough desks with Formica. A Formica representative will gladly show your own maintenance people how to do the job or recommend a skilled Formica fabricator near you.

Write **FORMICA**
4574 Spring Grove Ave., Cincinnati 32, Ohio

THE
NATION'S
SCHOOLS
MARCH 1956

Looking Forward

Death by Default

THE best of friends will disagree on how to enforce the Supreme Court decision on segregation. In a situation such as this, emotions may blur our logic and high sounding ethics may impair our sensitiveness to reality.

Whatever its merit or lack of merit, a segregation rider on a school construction bill would end any possibility that additional federal funds will be voted for schools this year.

The Supreme Court made two decisions, not one. As President Eisenhower pointed out to Congress on January 25, "the Supreme Court . . . specifically provided there be a gradual implementation and referred it back to the district courts so that it should be gradual." The justices recognized, he said, "the deep ruts of prejudice and attitudes and emotionalism that have been built up over the years in this problem."

Commenting on the President's message, the *New York Times* said editorially: "President Eisenhower was perfectly right in stating that 'the need of the American children for schools is right now, immediately, today,' and for suggesting that the segregation issue would delay passage of any such measure. It would not only delay it; it would very probably kill it. The Supreme Court has prescribed its own wise method for ridding this country of the curse of segregated education. That is one problem; federal aid to education is another. If we want the latter, let us get it without amendments that—no matter how sincere and praiseworthy their purpose—would in all probability kill it."

The denial of urgently needed federal help for public education in segregated states delays the very process by which the problem is eventually to be solved, namely, increasing the ability of the Negro to improve his own lot and his services to society. Depriving the southern states of much needed funds for building public schools is acting as foolishly as the man who cut off his nose to spite his face.

A voice from the South offers sound advice. *North Carolina Education,* official journal of the state education association of which Ethel Perkins Edwards is executive secretary and W. Amos Abrams is editor, concludes editorially:

"The Supreme Court decisions were designed to give us an opportunity to study and solve the segregation problems in our peaceful South but not an invitation to aggravate them by mustering race against race.

"Change is in the offing, slow and certain change, which must not now be hurried against the will of the majority. There is no place in our present or our future for those who would sacrifice the educational opportunities of any of our children on the cross of racial hatred or political expediency and thus condemn them to illiteracy, poverty, disease and other such offspring spawned by Ignorance."

The Measure of Merit Rating

CAN we agree on some common sense about this business of merit rating? The assertion that most teachers do not believe in the principle of higher pay for better teaching is fallacious.

The assumption comes from the misinformed layman. A recent example is a statement by David B. Dreiman in his book, "How to Get Better Schools," published in cooperation with the National Citizens Commission for the Public Schools. (The book is reviewed on page 124.) Mr. Dreiman writes: "The principle of giving extra pay for extra performance, or paying more than a mere average for outstanding value, is well established in business and industry. Yet teachers generally oppose the principle of merit incentive pay while laymen favor it."

Mr. Dreiman cites no facts upon which he bases this assertion. Possibly he (and the National Citizens Commission) is misled by emphatic statements of spokesmen for the American Federation of Teachers. Recently Carl J. Megel, president of the A.F.T., stated in Chicago: "Every A.F.T. local is prepared to fight the merit rating device, wherever and in whatever guise it may appear." But the A.F.T. includes less than 5 per cent of the teaching profession, and this tenet is one of the basic principles upon which it differs with the great majority of teachers.

Real evidence is offered by the Ohio School Survey. A.F.T. members in the larger industrial cities of Ohio were adequately represented in the statewide opinion poll, concerning which the report (dated May 1,

1955) states: "Perhaps the most desirable achievement in salary scheduling is to find some practicable and fair means by which teachers who do outstanding and unusual jobs can be recognized with above normal salaries. The study committee found that 63 per cent of the teachers, 79 per cent of the school administrators, and 88 per cent of the school board members responding to its inquiry thought that this should be done. It should be borne in mind that this proposal is not for a merit salary schedule in the usual sense: It would supplement the usual automatic schedule based on training and experience with recognition for outstanding and unusual merit."

On one point virtually all teachers will agree, namely, that they do not accept the businessman's traditional definition of merit rating. They do not want to go back to the hit-and-miss, opinionated basis upon which salary increases were granted. Why? *Because teachers have had it.* Veteran teachers can tell you some seemingly unbelievable stories about supervisors (better known as "snoopervisors" in those days) whose infrequent visits to the classroom were the principal basis upon which the teacher was "rated" for the next year's salary. The size of the pay check often depended more upon how the teacher *con*formed to a pattern of administration than how she *per*formed as a superior teacher.

But the mistakes of the past are no excuse for saying "It can't be done." Here is where most teachers part company with the philosophy of the A.F.T.

The layman will say that teachers *are* rated: They are judged by the community; they are judged by their fellow teachers; they are judged by parents and children. Of course they are! And it is this fact that gives us the clue for developing a workable basis for evaluating teachers' services.

The prerequisite seems to be that teachers themselves shall have a part in this rating. Whatever method is devised should be acceptable to reasonable minded members of the profession, and it should surely involve the combined judgments of the teacher's associates and those whom she serves.

Through patience, trial and error, some acceptable methods of discovering the superior teacher are being developed, such as those described in the article, "Merit Rating—How and by Whom?" by Harry A. Fosdick in our January issue.

But the story does not end here. Much has been done to improve the competencies of the teaching profession in a manner that business seemingly fails to recognize. Within the last 20 years, the qualifications for teachers have been raised far more rapidly than salaries have been increased. Take, for example, teacher certification. It wasn't so many years ago that a school board could issue a special certificate granting anyone the right to teach in that district regardless of the individual's basic training or professional qualifications. And it wasn't so long ago that the majority of teachers in this nation had no more than two years of college training.

Another selective process by which the good teacher is protected and the poor teacher eliminated is the probationary period of tenure laws.

Screening out the undesirable candidate also takes place in teacher education institutions.

And so, while we study and experiment with objective ways to recognize and compensate the superior teacher, let's not lose sight of the fact that the quality of teaching in all our schools has been upgraded substantially through higher qualifications for entering the profession.

Much Knowledge, Little Wisdom

ARE we the most "learned" generation? Some scholars don't think so. When the American Council of Learned Societies met in Washington, D.C., recently, the summarizing speaker declared that in America today we have much knowledge but little wisdom.

The speaker was Barnaby C. Keeney, president of Brown University. Said President Keeney: "We cry, in a society that has developed greater technical skill than any other in the history of the world, that we do not have enough technicians and scientists, but we do not inquire whether or not we have wisdom to use them. We have now the greatest powers—physical, mental and social—of any people of any period in the history of the earth, and we show the greatest lack of confidence in these same powers. We have no confidence in the integrity of our own people. This, I think, is the keynote of our age.

"We have more learned nonsense about education written every day in every year and we have, proportionate to our effort, less education than anyone has ever had before. We have more talk about the return to religion and the need for spiritual things than any age has before, but we have less real spiritual life than most.

"We forget that beauty can be appreciated but not footnoted, that the deepest feelings of man cannot be fully explained by the behavior of rats in a maze, and that men act more often on the basis of their assumptions than of their knowledge," he said. "We seek to know, but we fail to understand."

It's good for our souls, and for our egos, too, to be evaluated by someone besides our own fellow workers, to have our efforts "rated" in terms of the values stressed by the humanities.

The American Council is composed of 25 national societies concerned with the languages and literatures, philosophies and religion, history and the arts. Perhaps, as they warn, we should stop thinking for a few moments about bonds, buildings and buses and give priority to the question: How much understanding and wisdom are today's schools imparting to our future citizens?

The Editor

Tucson and Phoenix, Ariz., now hire teachers on qualifications alone, regardless of race. Tucson now has about 30 Negro teachers, one of whom is shown at the right. She, Patricia Scott, is one of the most popular teachers at Gertrude Cragin School; only one of its 558 pupils is a Negro. When Phoenix first integrated its schools, there were 400 teachers, including 70 Negroes. Since then 11 Negro teachers have been employed by the city schools.



The last four years in Arizona offers

A PATTERN FOR INTEGRATION

A VISIT WITH SCHOOL ADMINISTRATORS IN PHOENIX AND TUCSON

ARIZONA's experience in racial desegregation of its public schools may be an indication of what can happen elsewhere. It was in the spring of 1951 that Arizona's legislature passed a law permitting mixed classes. That was a full three years before the segregation decision of the United States Supreme Court in May 1954.

Both Phoenix and Tucson—Arizona's two largest cities—are now integrating their schools. But their methods provide a study in contrasts.

When the state legislature voted in 1951 to make desegregation permissive on a local option basis, Tucson went a step farther. It immediately integrated all of its elementary schools. Phoenix acted not quite so quickly; in the high schools integration became complete in 1954, whereas the elementary school district is following a timetable that will not complete integration until 1957-58. But so far in either city there is apparently no serious thought of turning back.

Arizona had a comparatively long history of race segregation. The territory was populated mostly by settlers from Texas, Kentucky and Tennessee, who brought with them strong Southern traditions. In recent years, however, the population increase has come principally from the North. And the sentiment against racial segregation has been rising.

Negro and white pupils were first segregated by law under an act in the territorial legislature in 1909. Three years later, when Arizona was made a state, the first state legislature passed a similar law over the governor's veto.

Efforts to end segregation began during World War II. But it was not until 1951 that a bill abolishing compulsory segregation finally passed. The law gave local school boards the power to decide their own policies on this matter.

Loren Vaughn, superintendent of the Phoenix elementary schools, says that, once the state permitted desegregation, "we felt it was the right thing" to do. The school board didn't want to wait to be ordered to desegregate, Mr. Vaughn added, yet it wanted to give people time to get used to the idea.

So in the spring of 1953 the board announced that kindergartens would

be desegregated on a permissive basis in the fall and on a mandatory basis a year later. When kindergarten integration became mandatory, in 1954, integration of the first three grades was made permissive. "It gave enough time for families that were completely prejudiced against desegregation to make other plans," Mr. Vaughn said.

The board also made desegregation in the upper elemenetary grades optional so that children could be graduated with their own classes.

DEADLINE IS 1957

Today the schools are integrated on a mandatory basis from kindergarten to sixth grade. The seventh and eighth grade pupils are still permitted to attend a school outside their own district. By September 1957 all pupils will have to attend the school in the district where they live.

The city now has about 12,500 elementary students. Some 1700 of them are Negro. Of the present 24 schools, at least half now have pupils of both races, Mr. Vaughn said.

The switch has been made without controversy and without friction," the superintendent declared. "I have not been called in to handle a single incident regarding race." He credits the editorial support of the city's two daily newspapers, the *Gazette* and the *Arizona Republic,* for much of the smooth operation.

When Phoenix was first integrated there were about 400 teachers, including about 70 Negroes. Since then 11 Negro teachers have been hired. "Some people thought we would replace every Negro teacher with a white one," Mr. Vaughn said. "But we have established a policy of hiring new teachers regardless of race. In at least a few instances we have picked Negro applicants over white applicants because the Negroes were better qualified."

So far, Negroes are teaching in every school that has mixed enrollment.

Mr. Vaughn believes "everyone has profited from integration."

"Our *children* are profiting most," he said. "They are all getting the opportunity to see other races perform. Now there are different cultural backgrounds in the classroom. It's a unifying force."

"LESSONS FOR THE SOUTH"

Mr. Vaughn concedes that the South may not be able to go as fast as Phoenix has. "But integration is coming," he declared. "It may take 20 years in parts of the South. But it is coming, and the South can learn some lessons from us."

Harold L. Gear is superintendent of the Phoenix union high school district. Before desegregation the city had five white high schools and one for Negroes. Desegregation was made permissive in 1953-54, and there was a big drop in the enrollment of Carver High School, the Negro school.

In 1951, the year before desegregation, the enrollment was 425 students. The first year pupils were permitted to attend any school of their choice the number of students dropped to 325. "It indicated the Negro students wanted to go to the white schools," said Dr. Gear.

As enrollment dropped at Carver, it became more difficult to offer a complete curriculum. So in June 1954 the school was closed. Of Carver's 22 Negro teachers, at least two are assigned to each of the other five schools. The Carver plant is now a warehouse for the school system.

NO APPREHENSION

So far, since integration began, only one new Negro teacher has been employed. "But," said Dr. Gear, "our experience with Negro teachers in white schools has been so fortunate we have no apprehension about hiring Negroes."

At first Carver's Negro principal, W. A. Robinson, was made an administrative counsel, "to act as a fire department." But there were no "fires," and during the first year of integration only three or four matters were referred to him. Now, Dr. Gear said, Mr. Robinson's duties are principally to lead the schools' professional staffs in seeking ways of improving intergroup relations generally—not just race relations.

TUCSON TOOK IT FAST

Desegregation in Tucson, some 110 miles southwest of Phoenix, was handled differently. It came fast.

Tucson's superintendent, Robert D. Morrow, says he never wanted to be either a hero or a heel. But he turned out to be both—depending upon your point of view. For his efforts in behalf of integration he has been called virtually everything—including both "Communist" and "Fascist." For the same efforts he was named Tucson's Citizen of the Year by the city's Council for Civic Unity.

Integration came to Tucson in 1951. The board voted in April to integrate the district's schools—only a few days after Arizona's governor signed the law *permitting* desegregation. "The board wanted to go slowly at first," Mr. Morrow recalls. "But I recommended that we integrate as rapidly as possible. I don't believe in cutting off a dog's tail an inch at a time. If you have a tough job, the quicker it's started the easier the task."

Immediately the board voted new district boundaries. Beginning in September, it ordered that all children go to the school in their own district. Looking back, Mr. Morrow noted,

(*Text Continued on Page* 46)

Phoenix, on a gradual permissive basis, is changing to desegregation "without conflict or friction." Former Negro high school converted into needed office space and warehouse. . . . Tucson moved rapidly, causing "considerable smoke for a short time," but accomplishing a "most successful transition" as viewed in retrospect.



Carver High School (above) was formerly Phoenix's Negro high school. Now that the city's high schools have been integrated, this building is being used as a warehouse for the school system. The old auditorium-gymnasium of the high school (below) is now used as a central storage area for the schools.



"Although there was a considerable amount of smoke for a short time, the transition from segregation to desegregation has been most successful."

The "smoke" consisted mainly of telephone calls from irate white parents—usually anonymous. "I took a lot of abuse," says Mr. Morrow. "The board took a lot of abuse, too. The only difference is that I got paid for it. Some of the people got pretty nasty. But they get nasty about other things."

As far as the superintendent knows, only about half a dozen white pupils were actually withdrawn from the school system. As for the telephone calls, they stopped long ago.

Tucson's 27,400 pupils attend 37 elementary schools, seven junior high schools, and three senior high schools. More than half of the schools have Negro pupils now. No one knows for sure, because records of race are no longer kept. At the time the schools were integrated there were about 750 Negroes out of 17,000 pupils in the school system.

Today, the school board hires teachers regardless of race, Mr. Morrow says. He estimates there are "27 or 28" Negro teachers in the system—perhaps seven or eight more than when integration began.

Assignment, too, is made regardless of race. And some Negro teachers have been assigned to all white schools.

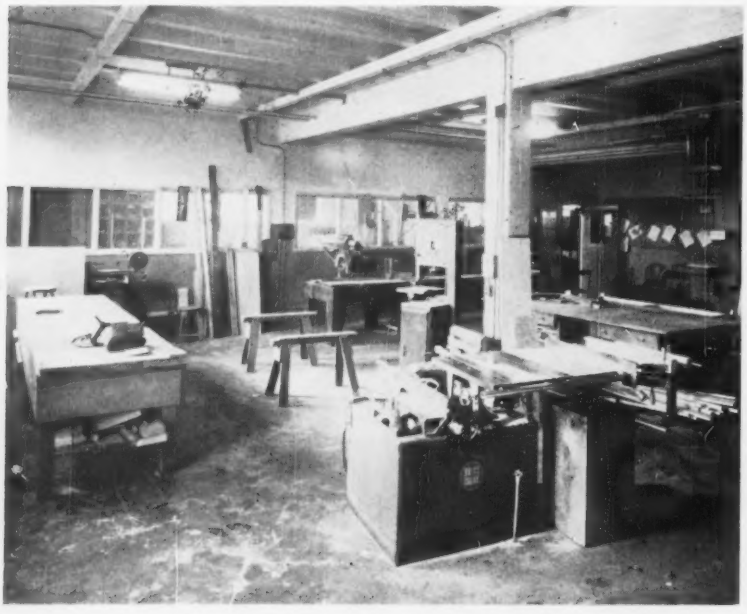
One Negro teacher, Patricia Scott, is in her third year at the Gertrude Cragin School. The district is an upper middle class neighborhood in the northeast section of the city, far from where most Negroes live. Of the school's 558 pupils, only one is a Negro. Of the 19 teachers, only Mrs. Scott is Negro.

According to Frederica Wilder, Cragin's principal, Mrs. Scott is one of the most popular teachers in the school. "Many parents ask me to assign their children to Mrs. Scott's room," Miss Wilder says.

Mrs. Scott believes she has found "an ideal situation" in her assignment. "I have run into no racial problems whatever," she declares. "All the teachers have been wonderful to me. And the parents seems to like my policy of strict discipline. I've had no trouble at all."



The secretarial staff of the school system's maintenance department uses the former Carver High School's business education room (above). The industrial arts department (below) is the school system's repair shop.



EXTENDS INTO COMMUNITY

Supt. Morrow has noted that since the schools led the way four years ago, there have been a few more extensions of desegregation in the Tucson community. When the Cleveland Indians come to the city for spring training now, Negro and white ball players are housed in the same downtown hotel. When the Arizona Education Association met recently, only two of the dozens of hotels and motels refused to accept reservations from Negro members. Negro teachers are served in what used to be all white restaurants "with no apparent objection." A Negro mother has been elected president of the parent-teacher association of a predominantly white school.

Mr. Morrow feels that Tucson's integration program has been successful "in spite of the fact that we are a border town and have a high percentage of people from the Deep South living here." He adds, "I wouldn't say that everyone is happy about the program, but I would say that everyone has been fair and cooperative."

A major skill of the school superintendency is

Making—and Keeping—Friends With the Press

JOHN P. MILLIGAN
Assistant Commissioner of Education for New Jersey

EVEN when there are good relationships with the press, there are times when the schools may appear in a poor light in news stories. Certain activities and attitudes on the part of school administrators will go far toward establishing and maintaining right relationships with the local newspapers.

In his relations with the press representatives, the school administrator cannot afford to be a "big shot." If the administrator were a newsman he would not like the big-shot attitude. Reporters do not like big shots and they have a ready means of taking pot shots at big shots; furthermore they have been known to do just that.

An application of the Golden Rule is simply to be friendly with the representatives of the press. As a matter of fact, for a school administrator having the normal tendencies to extroversion, it would be difficult to be unfriendly with most newsmen, for they, too, are a friendly lot. It is true, of course, that the superintendent may be busy when the reporter calls. Even so, in the light of common sense and the Golden Rule (suppose he were the reporter), he ought to be able to crowd in 10 minutes. If he can't, there is still an easy way of maintaining good relations, and it is strange that some superintendents have not realized this. It will take just 60 seconds of the administrator's time to leave his desk, go to the outer office, and with a friendly smile ask the reporter's consideration, urging him to return at a later time. The last and the worst thing to do, as it is reported some have done, is to send word by the secretary: "I'm busy. Go away."

EXAMPLE OF BAD PRACTICE

Another bad practice is that of handing mimeographed statements to the press representatives, giving them no opportunity to see or to question the administrator. There are numerous occasions when the administrator will find it necessary to furnish press representatives with carefully prepared statements. But, these prepared statements can be given to reporters with a friendly smile. Perhaps it may be necessary to say only: "Boys, it's all there. I can say no more. Thanks a lot for coming around to get this."

In one community certain teachers were under attack as "subversives." The truth is that they were loyal, qualified teachers possessing the ability and the courage to discuss controversial issues in their classes as a proper educational enterprise. The board determined to hold a public meeting to air the matter. The superintendent was asked to prepare a statement for the press outlining the reasons for and the nature of the meeting. The superintendent prepared the statement after discussing the nature of its subject matter with the members of the board. He then asked the reporters of the local papers to call. He handed them the release with the request that any quotations be verbatim from the release. The friendly relationship already established with the group guaranteed that there would be no distortion of this matter.

In another community, the superintendent found it necessary to issue a statement concerning vandalism in and around school property. He simply mailed it to the local papers. He was surprised and chagrined to read, the next day, a negative "interpretation" of his release in certain of the local papers. No doubt this resulted from his practice of giving the newsmen short shrift whenever they called to see him.

It is not necessary for an administrator to seek to ingratiate himself with newsmen. All that is required on his part is a friendly cordiality, together with the ability to put himself in their place.

In one community a teachers' strike occurred. The one daily paper presented the story in such a way as to reflect upon the actions of the superintendent himself. Until that time his relationship with this paper had been good, but this story had been written by a reporter new to the city. In the next board meeting a board member made a statement in the presence of this reporter that was critical of the recent news story. The board member did not know that the story had been written by the new man, but the superintendent knew.

EXAMPLE OF SUPREME TACT

The superintendent took the high road. He came to the defense of the reporter. He said that he regretted that he had appeared in such an unfortunate light in the recent news story. At the same time, he said, there was nothing in the release that had not occurred or been said. "We must accord to the news writer," he said, "the right to select what seems newsworthy to him. We cannot blame the newspaper for reporting the news." He further stated that for a superintendent to appear in a poor light in the newspaper was an occupational hazard not common to superintendents alone. Needless to say, the schoolman's charitable attitude paid off in the long run, for he endeared himself to this reporter.

Regardless of the good relations which the school administrator may have established with reporters, schools may suffer at the hands of local newspapers unless the editor of the paper is favorably disposed toward the schools. It is good that so many editors are well disposed toward the program of education in so many of our communities. When editors become opposed to the local schools, they are

sometimes hard to reach and hard to persuade, for the nature of their work requires that they be "hard headed."

In one city where the editorial policy of the leading paper seemed unfriendly to the schools, the superintendent was able to become well acquainted with the editor by virtue of their being members of the same service club. He found the editor to be a personable fellow, although a man of definite opinions. The two men formed the habit of sitting together at the weekly luncheon. The schoolman never argued any school or other issue with the editor. When he could he gave the facts; when he had no facts he admitted ignorance. After a time the editor began to ask the schoolman's opinions on various matters. The superintendent thus was able to demonstrate his deep-seated conviction that good schools make better communities. It was interesting to note how the editorial policy of the paper began to change and how, in the course of time, the paper became a supporter of the local school system.

In another city a new superintendent invited the editor of the local paper to address the teachers at the first staff meeting of the year. He knew that the editor was lukewarm toward the schools, so he asked him to speak on the subject: "How to Make Our Schools Better." The editor spoke effectively, making some practical suggestions, especially concerning possibilities for improving public relations. The superintendent was able to initiate programs which gave evidence of attention to the editor's suggestions. Here again improvement in the attitude of the paper's editorials toward the schools was noted.

SINCERITY PAYS

In both the instances just discussed, the principle of sincerity must be emphasized. Neither superintendent glad-handed the local editor. Neither superintendent sought to sell anything. Both, on the other hand, showed that they possessed a sound philosophy of education and conviction about the effectiveness of good schools. Both superintendents showed themselves willing to profit by suggestions.

Some boards have deemed it advisable to issue their own news sheet at regular intervals. Such experience and information as I have would indicate that such papers are quite widely and carefully read and digested by the public. Though the cost is considerable, it is not prohibitive, and the cost is justified by the importance of getting reliable information about its schools to the public. Such a publication has more space for greater detail than most local newspapers; therefore, a board edited sheet can highlight what it deems important, rather than depend upon the headline writers of the local papers. It is well to remember that the reporter does not usually write the headline to his story. Many a worthy story, one favorable to the schools, is negated, in some measure, by a poorly worded headline.

ETHICS OF CLOSED MEETINGS

The question of whether board meetings should be open or closed is a problem of considerable ethical import. One can subscribe, in theory only, to the oft repeated statement that "public business should be publicly conducted." In practice open discussion of certain issues is unsatisfactory, and the chief reason for its failure lies with the press. I hasten to say that this is no criticism of the press. Obviously, reporters will report what seems to them most newsworthy. Obviously, what the public reads about the board's meeting is the interpretation of the reporter. In a land where the public's business is public, those who are responsible for conducting the public's business usually find it advisable to weigh words in the presence of a large public gathering or of a news reporter.

Some years ago a local board in a regular meeting raised the question of high school students' smoking during school hours. The superintendent admitted that student smoking was quite a problem. He gave his estimate of the percentage of students who were habitual smokers, pointing out that some students, no doubt, were so addicted to the habit that they could not go without a smoke from 9 a.m. to 3 p.m. Thus, he said, there would be those who at lunch time, or even during school hours in student toilet rooms, would steal a smoke.

At this point, a board member raised the question—he did not make a proposal—of whether it might be advisable to set up a smoking room in the school where students could smoke, with the written permission of their parents. The discussion proceeded, board members forgetting the presence of a reporter from a paper which enjoyed statewide circulation. At the conclusion of the discussion, the superintendent requested that the reporter leave this part of the discussion "off the record."

The reporter would not commit himself, and the next day's paper carried a bold-faced box on the front page under the head: "Nameless Board Befogged With Smoke." The story highlighted the question of the smoking room raised by the one member as a definite proposal being considered by the board. Needless to say, the superintendent received mail from all over the state, all of which indicated no understanding of the problem but all of which strongly opposed the student smoking room idea.

How can questions be raised and answered concerning controversial matters in open meetings without adverse newspaper publicity? Again I hasten to support the ability and attitudes of most reporters. But it is obvious that any report on a discussion of a controversial issue is almost certain to impress a considerable number of people unfavorably. This being so, what responsibility have the board and its officers? I believe that the board and its officers *are entitled to consider problems—to think out loud together—in private.* If a controversial matter must be discussed in public and in the presence of reporters, experience teaches that it is *not* wise to speak freely or to ask questions to gain information necessary to the making of wise decisions.

Open board meetings then become the means of interpretation, of clarification for the public, and of official action. The closed meeting has for its purpose the achievement of sound policies by discussion of all pertinent matters related to the issue under consideration. There is every reason interested laymen, teachers and others should be admitted to closed meetings to help in resolving issues. It *has* been possible, in some instances, to admit the press to closed meetings with the assurance that the discussion is off the record.

Right ethics, here, are in terms of the intent of the board. If the board's intentions are worthy, there can be no ethical reason for denying the members the opportunity to talk over their problems in private. If the board's intentions are unworthy, they will meet in secret anyway, regardless of what the rules may be. Can there be any doubt that the reasoning supporting these conclusions is supported by the ethics of the Golden Rule?

Mr. School Administrator,

Lift up your heart, even

YOUR PURPLE HEART

JAMES M. SPINNING
Former Superintendent of Schools, Rochester, N.Y.

I REMEMBER the still, small voice of the old schoolman who said, "You can't really train a man for administration. All you can do is to pick the fellow who has shown the most ability to learn and learn fast from his own experience." I remember the same man saying, "You can't get it all in the rules, especially the good sense and the human touch. If we could run by handbooks alone, you administrators would all be out of work." And thank God, I add, as far as teaching and school administration are concerned *automation* must forever be a dirty word. Our job may be typed, but it can't be taped.

A hundred years ago when I was young and flippant, to the questionnaires which reached my desk every couple of weeks wanting to know what training I considered most essential for a beginning superintendent I used to reply, "Complete background in the fields of law, finance and psychiatry. If a man happens to know something about education, that's nice, too." Now I am old and staid and serious and humble. I don't know for sure even that much of an answer.

OH, YES, you can win the Purple Heart in school administration. You will have the wounds, and you will have the scars by which to establish your heroism.

Be reconciled to it. Every school and every school system must have a chief worrier—and you'd better be it. For the time to worry hardest is when others start worrying more than you do. Every twice in a while you may find that out of mistaken sympathy for you, out of a sincere desire to ease your burdens, something you really ought to know has been kept from you. Then the thing you might have prevented boils up all over the place. Some of my stickiest problems grew out of just this kind of mistaken kindness.

You really have something when you add that possibility to the natural tendency we all have to bury our heads in the sand until the bad news blows over. But just the same, as the ostrich discovered, wherever our heads may be the wind can still raise hell with our plumes. The things you don't want to hear can be the ones that are most important for you to know.



Have a pad handy always so that you can make notes of the things so easy to forget in the turmoil of the day.

In administration you just can't run for cover. There ain't no cover. If you can't face up to the wind, even feel a bit of exhilaration in facing the gusts, administration is not for you. It takes guts to take gusts. The big thing is not to feel sorry for yourself. That is the lowest form of pleasure. The cause you serve is too big for small souls.

Let me first touch on some trivial matters, such as office management. These things must be trivial, however important they seem to me, because a lot of good guys don't even try them. At any rate, here they are.

Whether you are in a school office or in that sanctum called the superintendent's office, cast yourself in the rôle of the other fellow to the point where you don't keep people waiting. I am aghast at the callousness of executives who keep people with appointments cooling their heels and heating their emotions.

When you or your secretary builds your daily schedule, allow for expansion. Space your appointments so that you can take the unexpected but inevitable telephone call without throwing the whole day out of gear. If you must deal with a horde of students about registration or work permits, issue numbered tickets to them so that they won't have to queue up interminably. You aren't running a doctor's office. Your problems will be reduced if you set the stage so that your patients don't become *im*patients.

As you deal with people, get yourself the reputation of being a listener instead of being just a talker. How many times I've had parents complain that the principal would never listen. Don't you know that a child or a



"I christen thee Dorothy," I said, and that is when I lost my mike fright.

parent *needs* to get things off his heaving chest, and that only when he has done so can you get something else on it? "We have two ears and one mouth," said Zeno, "so that we may listen more and talk less."

HANDLING CRANKS

While I have seldom heard a complaint that had not at least some bit of warrant, I admit that the certified crank is something else again. Finally I learned that one good way to handle him, and especially her, is to ask for the story in writing. You want to be sure, you say, that you have all the data available for study. Frequently that ends the matter. So few people can endure the agony of writing.

Have a pad handy always. Make notes for yourself wherever you may be: the telephone call you must make, the salient point so easy to forget in the turmoil of the day.

If you have a dictating machine—and why not in this age?—take 90 seconds between interviews to put a memorandum on it. Make yourself a shorthand system, one which the gals in the office can transcribe. I've saved myself hundreds of hours by writing *tr* for teacher and *pl* for principal. And learn to type. There will be times. Speaking of and into dictating contraptions, let me confess that I couldn't use one of the darned things until I christened it Dorothy after my secretary and spoke to it precisely as I would to her. That worked; no more mike fright.

You may never learn to compose short letters until you sketch them out first in pencil. If you dictate letters, you resort to blunt, childish sentences or you get involved in long, stringy ones and fall flat on your participles. You feel that you can't readily start again, and, not knowing how the hell to get out of it, you just pile up the clauses into super-Pentagonese. You may even end up with something like this, which I lifted from a letter sent out by one of my colleagues: "I am hopeful, of course," he wrote, "that the exigencies of the case may not necessitate the cessation of service that I have suggested." He meant, "I hope we won't be forced to make the cut." Come off it. Write as you speak—if you can speak to the point. It saves hours.

Before you sign the letter, read it over as if you were the receiver. Is it too hot, or too cold? Too cold, probably. So avoid formal phrases. They always have a frigid ring. Don't start a letter to a parent, "I regret to inform you that—." State the difficulty and then say, "I'm just awfully sorry about this. I know you are, too." See what I mean?

Be on time for your own appointments but take along a good book and a pad and pencil. Being on time builds your reputation for courtesy if for nothing else. The book gives you a spot of relaxation and maybe a spoonful of wisdom while you're waiting for the others to show up. The pads helps you order or reorder your thoughts for the coming conference.

When you are listening to a speech on education, don't. Turn the occasion to use by making surreptitious notes for the one you have to give next week. And if you are to be chairman, for heaven's sake don't say, "And now without further ado . . ." or follow your neatly contrived humor with, "But seriously speaking. . . ." Futhermore, remember that there are times when you must manifest a vast ability to keep your respected trap shut. Send for free booklet: "How and When Not to Make a Speech."

BUILDING A TEAM

So much for the little foxes that are always gnawing at your vines. Now for the lamb chops.

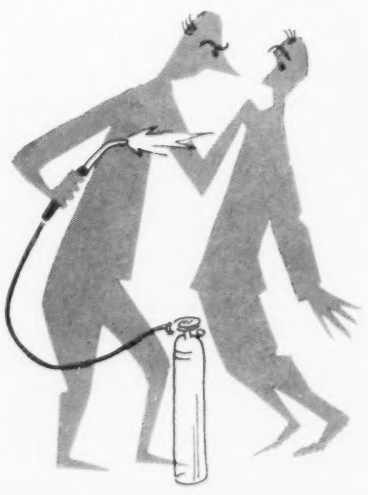
The first job of the school administrator is to build a team, even of the material he has inherited. Ninety-nine times out of a hundred it will be good stuff, or it could not have endured. To build a team you must have either a reasonable amount of earned prestige or an unreasonable amount of charm. The prestige had better be based in the first instance on good, sound, intensive and extensive journeyman experience in the classroom.

The studies may prove me wrong, but not yet have I been able to accept the theory which assumes that school administration is a thing apart from everything else in the school and that skill therein can be developed without a classroom background. Sometimes a banker or a bookkeeper who doesn't know the difference between potassium sulfate and a split infinitive can become the head of a chemical industry. But the schoolman's effectiveness depends far more on human relationship, the kind that requires a pretty complete understanding of what the staff is trying to do, an understanding that amounts to empathy and can embrace therapy.

The teacher has to feel that the principal could do it, too, certainly that the principal has in his time dealt *as a classroom teacher* with children and with parents and knows a lot about runny noses and broken promises and defeated longings and frayed nerves and class interruptions and lost milk money and worn textbooks and infantile attention-getting and adolescent feuds and frustrations.

ON NOT BEING DICTATORIAL

The old chain of command doctrine in principal-teacher relations has been largely outgrown. It should be. I well remember my dismay when on my becoming superintendent a principal pledged his allegiance to the new administration by writing me that he



When one of my principals promised to obey *my commands* just as he expected his teachers to obey *his commands,* I felt the urge to go over him with a blowtorch—just once lightly.

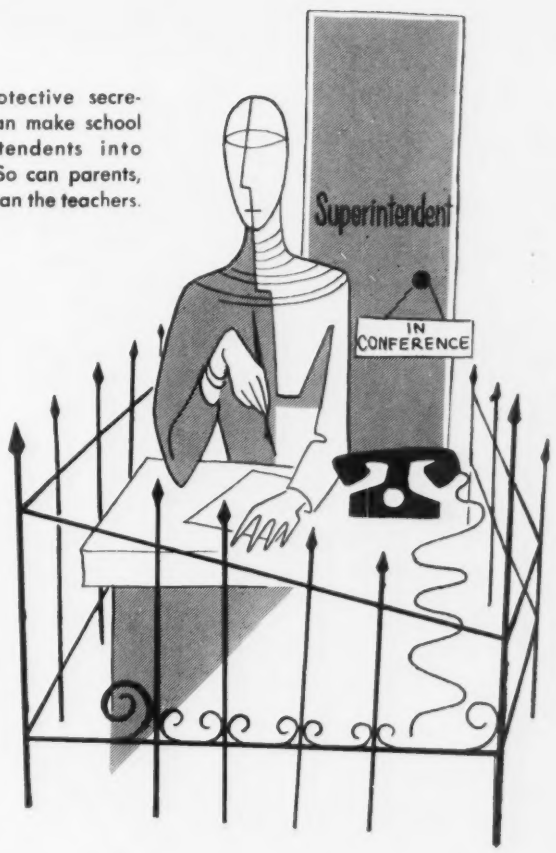
would obey *my commands* just as he expected his teachers to obey *his commands*. I felt the urge to go over him with a blowtorch—just once lightly. In my experience no superintendent would dare be as dictatorial or as upstage as some of his principals; few principals as excathedral and ipsedixical as lesser officers. One hates to get euchred into the rôle of bogey-man.

In the school corridor one day a principal, seeking to be friendly, asked a little boy whether he hadn't seen him in the office last week. The little fellow answered, "Not in the office. Not me. *I'm* a good boy."

Overprotective secretaries can make you into an ogre. So can teachers. So can parents. Bill Hawley and I love to laugh over this one which happened when he was principal of our Monroe High School and I was superintendent.

One night during the Christmas season my telephone yanked me out of bed at 2 a.m. A mother was terribly disturbed. Her 18 year old Monroe High son had been out on the school bus with the carolers. Where was he? What did I propose to do about it?

I guessed that her son had stopped off with some other lad and would soon be home. But she was so upset that I finally suggested she call the principal of the school, who would know the bus schedule and, living near by, might know more about the situation. In shocked tones she replied, "Oh, I wouldn't think of disturbing Mr. Hawley at this hour!" Knowing Bill better than she did, I volunteered to call him. An hour later, just as I had got back to sleep, Bill telephoned me that the boy had been right next door all the time.



Overprotective secretaries can make school superintendents into ogres. So can parents, and so can the teachers.

HE CAN BE REACHED

So why should a superintendent have a listed telephone? Not just so that anxious parents in snow-time can inquire all night through whether there will be school in the morning but so that in the real once-or-twice-a-year emergency he can be reached. That can make all the other sleep-killers worth enduring.

As for dealing with what seem to be recalcitrant administrative associates, I worked out finally the following series of steps for superintendents. After stating the problem and finding that you have understood it fully, you ask for a suggestion as to how to meet it. If that doesn't work, you make a suggestion of your own. If that doesn't work, you make a request. The next step is to make a decision. Only twice in 20 years did I have to issue an order. Generally in the preliminary discussion I modified my own view. Because, darn it, the other fellow is so often right.

Of course, one of the prime jobs of the administrator is to keep the lines of final authority clear. Being himself responsible, he must hold others responsible. In doing so, however, he will never hesitate to take his own share of any blame that's going around, and he will be selfish enough to assume more than his share whenever he can. Properly considered, this is a swell way to assert authority.

On the whole, school people are grand people, quick to understand your obligations as well as theirs. Most trouble comes with board members, who often aren't as smart even as superintendents in recognizing the difference between policy making and administration. The superintendent's task will be infinitely easier if the staff understands clearly that all *directions* must come through administrative channels. A staff member approached by a board member will then courteously state that he will be most happy to comply with whatever request or suggestion is made just the instant the word is transmitted through the superintendent. Then the superintendent will have to take it from there.

His best bet will probably be to point out that under the board rules (such rules either exist or should exist) he is permitted to act only on instructions from the whole board. He might add that there is nothing under the canopy which will so quickly divide a board—and ultimately a community—as any attempt at decisions by board members operating as individuals.

TREAT WITH RESPECT

While every member of the faculty team is to be treated with respect and courtesy, every member must know who is captain. Did I say captain? I forgot that every principal must spend part of his time and energy as a Mother Superior and also as a Father Confessor. For there are codes to uphold, sins to absolve, wounds to heal, pastoral duties requiring prayer and meditation.

The principal has the job of straightening out the little tensions on the

IN ADMINISTRATION *you can't win, but you can contribute. Who expects more? You can take comfort from history. Think of Moses and Galileo, of George Washington and Woodrow Wilson. They might win no final battles, but they did advance the cause. It was George Washington who after a few years of it exclaimed with an oath, "I'd rather be in my grave than in the presidency." No one can bat a thousand in administration; everyone can try. Few can make par for the course; all but the stupid can improve their game. We can all have fun on the 19th hole—while the cokes last.*

faculty, removing the causes of petty jealousies, kissing the burned fingers—and stopping there. His parochial duties take him not only into the homes of his pupils and Mike's Sweet Shoppe on the corner, and into close cooperation with social agencies, including the police, but into faculty homes in times of illness, bereavement and sudden joy. Otherwise he is no true coach to his team, though he must be far more tactful than any ordinary coach.

He must be careful to preserve a fine impartiality—or shall we say a universal partiality—in all school relationships, and like any other *paterfamilias* to lean over a bit backward on behalf of any wayward lamb, and to scare off any wolves from the fold. But the school administrator is entitled to his own particular friends among his faculty—if he can avoid any possible shadow of favoritism in the school part of his association.

In social dealings outside the walls all shop talk should be avoided just as far as possible. When a teacher becomes an administrator he should continue his old friendships and cultivate them. He should not conceal them, but neither should he flaunt them. His friends, if they are really friends, will understand.

If the principal expects to inspire loyalty in teachers and in pupils, he must himself be loyal, loyal to them, to his fellow principals, to the school officers in topside administration. He should be given the regard due a fellow administrator and share in decisions affecting his school so that even when he does not approve he will understand the decisions that are finally made, will accept them cheerfully, and will not pass the whole buck back to the central office.

It is entirely unnecessary to say this—and I wouldn't except that I have known an occasional principal to recommend a specific course of action with regard to his own school and then go back and denounce that action to his faculty, saying not one word about his own recommendation.

I love the principal who is proud of his school and his staff, who brags on his teachers, who praises them openly for their effectiveness. I cherish the principal who recommends his teachers for advancement. By the same token I am ashamed of the principal who allows himself to be jealous of the bright numbers on his faculty and belittles them. The big man takes pride in the progress of his associates. That is why I cleave to the *paterfamilias* concept. It makes for pride in the accomplishments of one's children. It means there will be little handwritten notes of commendation for them. It means there will be constant search for ways to offer temptations upward to every member of the flock so that all may have little notes. It means a family pride in what the family together accomplishes. And if this be paternalism, make the most of it.

Now, speaking of the administrator's relations with the press, which we distinctly were not, let me say that I found out (though later than I should have) that the schools' best friend can be the reporter and the editor—if only these people are given the complete background. Occasionally some of this must be done off the record. Don't be afraid. Dollars to fried cakes, the reporter will never let you down.

Of course, there must be a policy within the school system with respect to news giving. I advocate the most open sort of policy. This entails most careful choice of words, balanced statement, scrupulous care not to overstate.

Whatever the policy, even if at times it means denial of information, I suggest that no school official ever refuse to see a reporter or to answer his telephone call. When the gal hands you the slip which asks you to call back Joe Green at the *Star-Gazette,* I suggest you make that call a matter of first importance. Never dodge or appear to be dodging. Almost always you can answer the question or refer it to the proper person.

On the extremely rare occasion when for reasons of state you cannot answer it, you can always say, "I know it is your job to ask that question and you are right to do it. I believe, therefore, that you will respect me when I say that right now it's *my* job not to answer it." Remember that the schools are the public's business.

THE WAY IS HARD

The way of the administrator may be hard. Sometimes it is also hard to understand. He has so many clienteles, so many factors to consider, so many decisions to make. His sympathies are drawn in so many directions. He can never satisfy everyone. Often only he can appreciate his problems, and he cannot be forever explaining himself.

I am not too concerned about modern styling, but I do hope that you may all be blessed with sturdy frames, stout engines, fast pick-up, firm treads, fingertip control, the forward look, and most of all with wrap-around vision. Let the board of education furnish the safety belt. I wish you good mileage.

Sursum corda, etiam corda purpurea. Lift up your hearts, even your purple hearts.



A view of the central services building at Racine, Wis. The part in the foreground with a pitched roof is the original building once owned by the telephone company. The two-story structure in the background is the new part.

Even in a smaller city

It's Cheaper to Centralize Services

THOMAS A. LINTON
Director of Business Services, Public Schools, Racine, Wis.

CAN a small school system afford a central services building? Administrators at Racine, Wis., (population 75,000) wonder how they ever got along without one.

For more than a century the maintenance services of the city's schools had been scattered. A makeshift storehouse was in the basement of the city hall. Another was in a school building several miles away. There was no central receiving point. The laundry was in the basement of a junior high school. Plumbing and heating supplies were in at least two different locations: fixtures in a north side school, pipe on the southwest side. At night, drivers took their trucks home with them. There was no garage.

"It was," recalls Business Director Thomas A. Linton, "a mess. For many years everyone had been grumbling about centralizing services, but no one had done anything about it."

What finally translated the long-time grumbles to action? It was the growing classroom shortage, says Mr. Linton. One of the storage areas was on the ground floor of an elementary school. The school needed more classrooms. A new wing would cost at least $25,000 a room, but the storage area was suitable for conversion to classroom use.

"Our argument," said Mr. Linton, "was that it would cost the city $100,000 to build a four-room addition. But it would cost only $4000 a room or a total of about $16,000 to convert the storage space. We showed the school board and the city council that it would be more economical to move the services than to build a classroom wing. That's what sold the idea."

Furthermore, Mr. Linton and Supt. Ernest G. Lake were able to show that the money saved would be almost enough to build a central services building, improving efficiency and cutting maintenance costs.

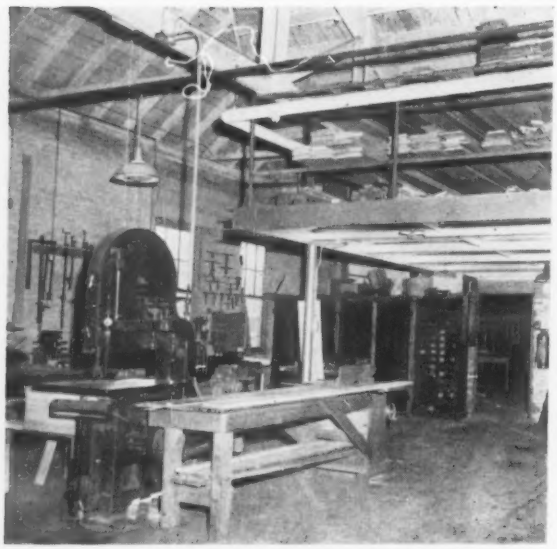
It finally became a question of location. Three choices were considered. Should they buy an existing building and convert it? Should they erect a new building? Or should they enlarge a recently acquired building that was being used for a garage?

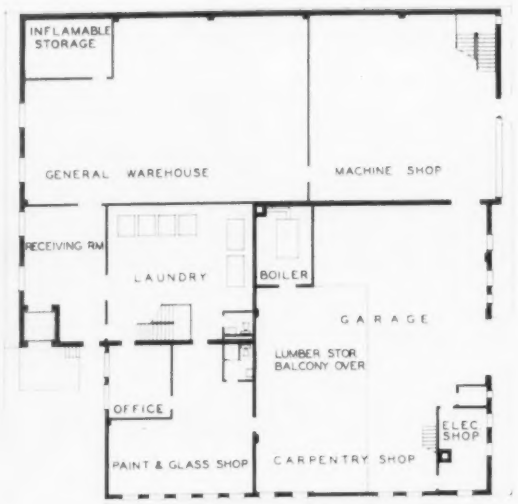
The business director and superintendent searched the city for available buildings, but manufacturing space is at a premium in Racine as elsewhere. Especially hard to find is space with the 200 pounds per square foot load fac-

Left: The loading platform. Right: All vehicles are stored under the lumber storage area.









Above: There is storage space for lumber above the carpentry shop. Below: A workman loads supplies on a truck. The second floor of the new building is used for storage.

Above: First floor plan of new building, designed by Hans Geyer, Racine architect. Below: The laundry washes 2000 towels a day for athletic department, plus cafeteria linens.





tor that a service building needs. There was no suitable building available, said Mr. Linton.

The second choice was also discarded, but for a different reason. A new building would have had to be built on the outskirts of the city—the only place where sites could be had. Further, it probably would have included new administrative offices to replace the present facilities in the city hall. That would have cost a total of about $200,000. According to Mr. Linton, it might have been too ambitious a project. "The board decided that it would not be wise to risk losing everything by asking for too much. There might have been some public disapproval had we asked for new administrative facilities. The board figured public pressure might influence the city council to veto the idea. We felt the best argument was still to 'release space for classrooms and to centralize the services.' It is not easy to sell the public on the need for new administrative offices."

That left only the question of enlarging the existing garage. The building was about 25 or 30 years old—a high one-story common brick structure with about 5600 square feet of floor space. The neighborhood was deteriorating.

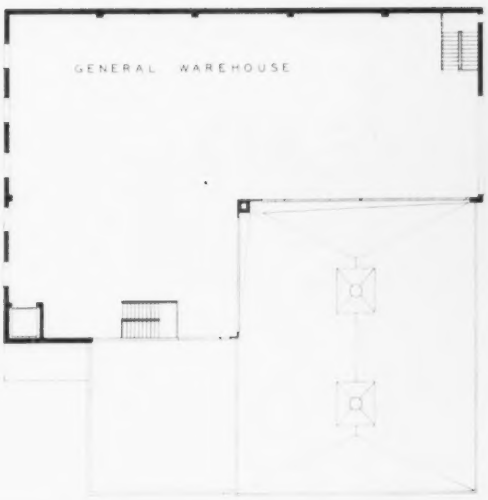
The site had one important advantage. It was in the geographical heart of the city. No school was more than 3 miles away.

There was room for expansion. Not much. But by wrapping a two-story addition around two sides of the existing building, they could increase the 5600 square feet to 15,800 square feet.

Plans for the new building were prepared by Hans Geyer, a Racine architect. A breakdown of costs is shown:

General contract	$52,155.18
Electrical contract	2,826.00
Plumbing contract	4,778.50
Heating contract	10,699.98
Architect's fees	3,525.63
Miscellaneous expenses	115.95
	$74,101.24

The cost of the new building, including some alterations to the old, and a new heating plant was $7.26 a square foot.





Above: Plan of second floor of the new part of the schools' central services building. Below: An employe works in the paint shop on the ground floor of the old section.

Above: The machine shop is a part of the central services building at Racine. Below: This is a general view of the storage area on the second floor of the new section.





To finance the building, the board put the proposal through in a package deal with several other building projects—mostly schools and classrooms. It went through the city council without any trouble. The entire cost came from the district's building fund reserve.

The building houses eight facilities —warehouse, central receiving, laundry, paint shop, carpenter shop, electrical shop, plumbing and heating shop, and garage.

The warehouse occupies the entire second floor. For the first time the school system is able to buy supplies in quantities large enough to attract discounts. Where they used to pay about $1.30 a ream for mimeograph paper, Mr. Linton pointed out, they are now able to order 4000 reams at a time and pay only 82 cents a ream. Further, the schools are able to pass the volume purchase savings on to some of the other city departments.

The hundreds of items in stock are listed by number in a 35 page standard stock catalog. The entire operation is handled by a single employe —an experienced storekeeper "who knows his job."

Before the days of the warehouse and central receiving, each school ordered separately. A textbook that was to be used in all 16 elementary schools, for example, required 16 different orders to the same publisher. "If the publisher made a mistake," said Mr. Linton, "it would take us until Christmas to straighten it out."

Two board of education owned trucks provide twice a week delivery service.

The laundry handles 2000 bath towels a day plus athletic uniforms and equipment and cafeteria linens. The former laundry in the junior high school is being remodeled into a general purpose room.

The expanded central services building opened for business about two years ago—in November 1953. Mr. Linton is already sold on the idea for any city regardless of size. The building is paying off in increased efficiency and economy. "It's not so hard to keep track of the maintenance crews any more," he said. "And we are saving on materials purchase and maintenance in excess of $30,000 a year."

Does the "little woman" have what it takes to be

The Superintendent's Wife

VERGIL ORT
Research Associate, Bureau of Educational Research, Ohio State University

IF THE superintendent is going to be able to cope with this complex business of education, he must have sympathetic and understanding help from his wife. What help and to what extent it should be given are the thesis of this discussion.

Although the school superintendent's wife may not be employed by the board of education, she has a significant rôle to play, a rôle somewhat parallel to that of the minister's wife. It is agreed that her rôle in the home comes first, but it also extends out into the community—depending, of course, upon her energies, talents, personality and attitudes.

The enigmatic quality of woman has long been a disturbing element, and anthropologists have found that in many primitive cultures women are considered as symbols of a fearsome mystery. In contrast, however, the Samoan culture considers the wife a companion for dancing, singing, joy and child bearing. Thus, although she has little or no part in such duties as cooking, village ceremonies, or council meetings, she shares in the delights of a happy life. About the only problem she actually creates is fighting with other village women over a man!

Regardless of the uncertainty of the rôle that woman plays, there have always been certain demands and expectations made of her—she is expected to grow up, select a mate, create a home, and have children.

Today's wife has a new rôle to play—one in which she serves as a potential and actual participant in political and civic affairs. Outstanding leaders of the world and our nation—including such men as President Eisenhower, Sir Winston Churchill, and Fritz Kreisler—have given public recognition to the influence their wives have had upon them.

Corporations, too, are interested in the wives of their executives because of the influence these women have upon their husbands. Corporations want their executives to be as efficient and as happy as possible, and they know that this is impossible without the right kind of wife. Some corporations not only are selecting men whose wives have desirable qualities but also are providing education, recreation and guidance for them. Indeed, corporations know well what John A. Brody meant when he said: "A man is only half a success until he has a good wife."

THE IDEAL WIFE

Data for a study concerning the rôle of the school superintendent's wife were collected by me through personal interviews and through questionnaires sent to school superintendents, superintendents' wives, presidents of boards of education, and lay people in Ohio. Their opinions are summarized in the following paragraphs:

1. The ideal superintendent's wife is able to meet and entertain with easy grace and sociability the professional friends and associates of her husband. She is friendly and interested in all people, regardless of race, creed, color or socio-economic status.

2. She is a church member, but usually she does not take leadership rôles.

3. She attends the major school activities with her husband if the activities do not interfere too much with her home duties.

4. Insofar as her home and family duties permit, she belongs to those organizations that seek to promote the betterment of social welfare. She avoids taking chairmanship rôles, but she does her part on committees. One superintendent expressed himself in these words, "She should be a member and a worker but not the 'bell sheep' in everything."

5. She knows the community and lets this knowledge guide her conduct in matters of personal discretion; at the same time she does not permit this knowledge to lower her personal standards if these are higher than those of the community.

6. She has no special cliques, and she does not identify herself exclusively with one group. While she will want intimate friends, many believe such friends should be outside the school staff.

7. She does not covet material things beyond her husband's level of income, and she does not incur unmanageable debts. This should not keep her from dreaming, however, for, as Robert Browning said: "A man's reach should exceed his grasp, or what's a heaven for?"

8. She is adaptable to change of environment, age and ideas.

9. She keeps herself, her home, and her family acceptably presentable.

10. Although the average school superintendent and his wife believe that it is almost an impossibility for their family as a unit to enjoy a wholesome and balanced life of work, rest and relaxation, they do believe such a balance is imperative for good health when it can be arranged.

11. The ideal superintendent's wife knows the limits of giving help to her husband, and she does not seek to perform duties that properly belong to the administrative and instructional staff.

12. If there is understanding in the home, she shares her husband's knowledge of some school matters, but she does not divulge confidential information to others.

13. As a rule, she should not give her husband a feminine perspective by sharing with him her impressions of school personnel and events unless she has the necessary information and background to make such judgments



After he spent two years as superintendent of schools in American Samoa, Dr. Ort and his wife went the rest of the way around the world before returning home. Here they are in Baalbek, Lebanon, famous for its Roman ruins.

valid and unless this information is requested by her husband.

14. She has a constructive interest and pride in the contributions made by the total school.

15. She is a good listener and gains a knowledge of that public opinion which can be constructively used by her husband in his profession, provided, of course, that she is capable of interpreting the data without bias.

16. She has a broad general education, a pleasing personality, and a sense of humor.

17. She is not overly aggressive or overdominating.

Further comments revealed that, if a school board wishes to interview or meet a candidate's wife prior to employing her husband, the home of the prospective employe is the best place to gain insights as to the wife's personality, interests, attitudes and tastes.

It is also the consensus of those questioned that a school superintendent's wife should be informally interviewed before her husband is appointed to a new position.

The general pattern of beliefs indicated that a school superintendent's wife should live a normal life based on her own interests, talents, time and education insofar as these do not conflict with the mores of the community of which she is a member.

During an interview in the home of a school board president, the president's wife remarked, "If a superintendent's wife is well liked, her husband will probably be well liked also." And although the wife would be rare indeed who would rank high on every item that has been mentioned, the well liked and desirable wife is probably one who achieves a happy and comfortable balance of most of these characteristics. As one superintendent's wife said, "She nearly has to be an angel with the tact and judgment of King Solomon."

Feelings Are Facts in School District Reorganization

ROALD F. CAMPBELL
Professor of Education, Ohio State University, Columbus

SCHOOL district reorganization is a movement of considerable magnitude and significance in the nation and in many states. During the years from 1944 to 1953 the number of basic administrative school units in the United States decreased from about 110,000 to 66,000. These shifts are seldom made easily; in most cases they entail considerable effort by professional and lay groups. These efforts sometimes convince a majority of the electorate, and sometimes they do not.

Some recent experiences in Ohio illustrate the importance of this matter and suggest the need for all possible insight regarding the process. The School-Community Development Study[1] sponsored a conference on school district reorganization which 400 school people and lay citizens attended. The concerns expressed by these people led to a number of studies. This article pulls from four of these studies some findings that may add to the knowledge of this important process.

THE FOUR STUDIES

Harold R. Capener[2] asked 24 Ohio county superintendents, all of whom had had extended experience with school district reorganization, to respond to a questionnaire. It was designed to test the following assumptions:

1. That approaches to school district reorganization devote much time and attention to the structural, material and factual phases of the program (economic factors, expansion of facilities, buildings, improvement of services, specialization of curriculum offerings, better teachers).

2. That these approaches require more attention to the social and psychological attitudes of the people affected (their habits, customs, points of view, vested interests).

3. That, to be successful, reorganization approaches must take into account the factors involved in each of the foregoing areas.

Responses gave extensive support for each of the three assumptions. Superintendents were asked to rank in order of importance those factors that they believe "most influence or affect the decisions of the people on the issue of school district reorganization." The results are shown in the accompanying table.

These data seem to support the proposition that, while facts about curricular offerings, pupil services, school plant facilities, and relative costs are important considerations, even more important are personal feelings and the influence of friends and neighbors.

FACTORS THAT INFLUENCE DECISIONS ON DISTRICT REORGANIZATION

Factor	Frequency[3]
Personal feelings, opinions and influence of friends and neighbors	120
Acceptance or rejection of what the proposed changes in school boundaries and arrangements will mean to the life or future of the neighborhoods or communities concerned	111
Cooperation or rivalries between neighborhoods or communities	108
Advantages or disadvantages of expanded subject matter offerings for students	92
Expense or economy in the school program	83
Advantages or disadvantages of information and facts presented by professional schoolmen from county and state levels	77
Advantages or disadvantages of expanded school plant facilities	65
Advantages or disadvantages of expanded services to pupils	54

IDENTIFYING LOCAL POWER

In a recently reorganized school district where proposed bond issues for the construction of a new high school plant had been defeated five successive times, Benjamin F. Davis[4] chose to study the community power structure. His specific purposes were stated as follows:

1. Who are the individuals who influenced the organization of the school district and its subsequent operation?

2. What groups or organizations primarily influenced the organization of the school district and its subsequent operation?

3. What kinds of controls were exercised by those individuals and groups?

4. What were the acclaimed goals of individuals and groups?

Through interviews with a number of community informants he was able to identify the community leaders, ascertain their convictions with respect to the new school district and its operation, and learn about the methods used to defeat the five bond issues.

The basic difficulty seemed to be official sanction by the county board of education of a new district that

[1] One of the eight centers of the Cooperative Program in Educational Administration, sponsored in part by the W. K. Kellogg Foundation.

[2] Capener, Harold R.: The Influence of Social and Psychological Factors in School District Reorganization, unpublished manuscript, 1954.

[3] In order to arrive at a composite ranking score a weighting system was employed, i.e., each time a category was ranked first, eight points were assigned; second, seven points, and so forth.

[4] Davis, Benjamin F.: Community Forces in a Recently Organized School District, unpublished master's thesis, Ohio State University, 1954.



Northeastern Senior High School, Springfield, Ohio, replaces high schools at New Moorefield, Plattsburg and Catawba as a result of reorganization.

ignored the sociological ties existing among three small villages. The county board proposed that the largest of these villages be made a part of a school district embracing an entire corner of the county. The trading center for much of this area was not the village referred to but, because of topography and roads, the county seat town itself. On the other hand, the new school district ignored the ties of the largest village with its neighboring villages, each in another adjoining county, one about two miles and the other about three miles away. This matter was of such significance that the investigator concluded:

"Because of a close kinship and religious, fraternal, and social ties, the citizens of the community apparently believed their educational future lay to the north. The citizens declared that they found few, if any, allied interests with the citizens in the remainder of the district, whose fraternal and social ties were in the direction of the county seat.

"The power group made much of these sociological ties in their insistent campaigning against the present school district. It appeared that the power group successfully directed a large proportion of their propaganda toward the group to whom the sociological connections with Smithville were so important. There appeared to be a lack of cohesion, unity and decision among the school officials."[5]

Frederick Aho,[6] in another setting, did a study of the power structure of a community. In his case the conflict came at the point of joining two school districts into one. He proposed to find: (1) the identity of the individuals and groups who influenced the opinions of others on the reorganization issue; (2) the kinds of controls exercised by these individuals and groups in influencing the opinions of others, and (3) the objectives of the individuals and groups who influenced the opinions of others.

Again community informants supplied by way of interviews the basic data. In this case it was found that the basic issue was a contest for power between two factions in the community and more specifically between two leaders. The established leader had for many years placed his men on the board of education and on the township board. The emerging leader resisted this control and sought to upset it. One way of achieving this upset lay in combining two school districts, a course the established leader opposed.

LACK OF COMMUNICATION

Some of Mr. Aho's conclusions:

1. "The strength of both power groups lay primarily in their astute leadership and their keen knowledge of the habits, views and biases of the residents."

2. "The reorganization of the school district over the opposition of the local board of education furnished the power group opposing the reorganization an issue through which the group was able to attract a considerable number of adherents to its cause."

3. "The lack of any easy, two-way communication between citizens of the school district and educational leaders of county and district was a particular source of strength to the group opposing the reorganization. It enabled the group to misinform the citizens with respect to the merits and needs of the reorganization and thus win adherents to their cause."

4. "The group favoring the reorganization possessed three distinct advantages over the group opposing the reorganization; these were: (a) The group was organized earlier; (b) the group cultivated more channels through which influences were exerted, and (c) the group's members had more opportunity to participate in determination of policies and activities."[7]

Both power groups showed extensive knowledge of the opinions and attitudes of the residents. The group opposing reorganization was able to capitalize upon the lack of regular, easy communication between the citizens of the local community and the status officials of the county. The emerging leadership seemed to succeed, at least in part, because of the greater opportunity being provided for members of the group to participate in the determination of purposes and procedures.

A county where school district reorganization had been particularly successful was selected as a study situation by John D. Burkam.[8] He proposed to answer the following questions: (1) What were the conditions existing in Clark County prior to 1946? (2) How was the reorganization program of Clark County initiated? (3) What procedures were followed? (4) What results were achieved? Mr. Burkam used historical and interview methods to collect his data. He found that Clark County was able during a seven-year period to reorganize 14 local districts into six. This was done without a single remonstrance (a legal provision whereby a majority of electors may protest a district change), and in each of the new school districts bond issues to finance new high school plants were passed by substantial majorities. Procedures back of this success story seemed worthy of identification.

After careful examination of steps followed in each of the five reorganization programs, Mr. Burkam concluded:

1. "The county superintendent had established himself as an outstanding educational leader in the eyes of the people of Clark County over a period of 20 years prior to the initial reorganization movement in the northwestern district."

[5]Davis, Benjamin F., op. cit., p. 94.

[6]Aho, Frederick: A Study of Community Forces in a School District During a Period of District Reorganization, unpublished master's thesis, Ohio State University, 1954.

[7]Aho, Frederick, op. cit., pp. 87, 88.

[8]Burkam, John D.: School District Reorganization in Clark County, Ohio, unpublished master's thesis, Ohio State University, 1954.

2. "The county superintendent assumed the leader rôle of the movement in every district by: (1) studying the existing school districts in the county and urging the local boards of education to consider plans for the reorganization of their present school districts, and, (2) collecting and preparing relevant data."

3. "The local boards of education showed a willingness to examine the data and to discuss the proposed plans for reorganization in the light of what was best for their schools."

4. "When sufficient interest was shown by the local boards of education to consider plans for school district reorganization, the support of the local community leaders was sought by the county superintendent and the members of the local boards through face-to-face contacts."

5. "Local community leaders were educated to the values of the proposed plan and were then urged to go out and convince the general public of its values."

6. "In addition to frequent public meetings and joint school district meetings, there were home visits to the voters in each district to discuss the plans and to ensure the success of the program."[9]

SOME IMPLICATIONS

While the tentative generalizations I have suggested have grown out of four studies related to school district reorganization, one suspects that the relationships with the people of a school district regarding many other aspects of school operation would not be very different. In any case, it seems appropriate to suggest a few implications for school operation and for the preparation of school administrators.

At the operation level school leaders (county superintendents, local superintendents, or principals) must come to see the importance of the feelings and attitudes of people with respect to any part of school operation. In effecting any change in school policy, such as the entrance date for first graders, the attendance areas in a city school district, or district reorganization, this recognition would seem to be particularly important.

The school leader should also know how to sample rather quickly what these feelings are. Long residence in a particular community may have given him a sixth sense about this matter. More reliable for most administrators, however, would appear to be ready access to, and use of, a few opinion makers in the community. The Davis and Aho studies suggest rather formal ways of achieving this kind of rapport and information. With practice most administrators could probably simplify the procedure.

Another operating principle may be found in the use of subleaders in a community. Many school board members, if armed with appropriate information, can act in this capacity. This is perhaps also the basic rôle played by members of advisory committees to boards of education. Many superintendents who have organized successful bond campaigns have found the mobilization of scores of subleaders who could carry the message to their neighbors a most effective device.

This kind of testing of feelings and attitudes would permit school leaders to recommend those policies that seem to square with community values. Or, if new policies are contemplated, clues as to the community framework into which such policies are to be fitted would be rather clearly indicated. This may sound as though the administrator is to be an opportunist or a manipulator. That is not my intention. It is not opportunism to learn what ideas may or may not take, or to learn where a community is in its thinking. Nor is it manipulation for a school leader to work with community forces to help that community realize its best self. The rôle of the administrator is one of stimulating, one of organizing, one of coordinating, one of working with every humane movement found in the community.

If the administrator is to work this way, how can he prepare himself for such a rôle? First of all, the administrator needs thorough grounding in psychology, sociology and social psychology. These disciplines he must know in theory and in practice. If at the undergraduate level opportunity for study of this kind was not available, the gaps should be filled at the graduate level. This ordinarily means that professors of psychology, sociology, and other pertinent areas should be working closely with professors of educational administration. This relationship will usually result in education professors' learning more about other disciplines, and the professors of the related disciplines learning more about their practical application in field situations. Logically, this will result in improved programs for graduate students.

But the student cannot be an observer only. He must have field experiences that permit him to become a participant and to assume limited responsibility for certain projects. These experiences might be provided through field affiliations as a part of regular courses, through class projects which involve the actual study of school systems in cooperation with school staff and lay citizens, and through internship programs.

Regardless of how well this is done at the preservice level, however, opportunity for continued study and appraisal of practice at the inservice level is sorely needed. Very probably clinics of various kinds should be organized.

For instance, a school district reorganization, a bond election, or a significant change in curriculum could serve as the case. A small group of interested administrators, a professor or two from a cooperating institution, and a graduate student or two might spend a day hearing and analyzing a case. Steps taken to deal with the psychological and sociological aspects of the experience could be noted, their success ascertained, and probable reasons for success or lack of success deduced. An experience of this kind once a month would sharpen the insights and skills of practitioners, students and professors alike.

You're not likely to fail if you:

1. **Always keep in mind the personal feelings, habits and beliefs of the people.**
2. **Work within the social framework of the community.**
3. **Establish a face-to-face relationship with local board members.**
4. **Rely on local leaders to assure their neighbors that the new arrangements make sense.**

[9]Burkam, John D., op. cit., pp. 87, 88.

Board Action Isn't Legal—

unless it's taken in the manner the law prescribes

LEE O. GARBER
Professor of Education, University of Pennsylvania

WHEN is an otherwise legal act of a school board *illegal?* When it is not taken in the manner prescribed by law.

It is an old legal maxim that "the mode is the measure of the power." By this is meant that the legality of an act of a board is not determined solely on the basis of whether the board had the authority to take the specific action but, also, by the method it followed in taking that action. Apropos of this is the fundamental principle of law that a public board or public body must act as a body, or unit, in performing acts requiring the exercise of discretion or judgment. Board members may not act in such cases individually, and a board may not delegate the performance of such acts to an individual or to a committee of the board. In other words, a school board's acts are legal only when the board acts as a body at a meeting that is properly convened. Basic to the legality of its actions is the legality of the meeting at which the action was taken.

Following are some legal principles involved in determining whether a particular meeting and its resultant actions are legal — principles that should be the common knowledge of all board members and all superintendents, whose prerogative it should be to sit in on such meetings.

HOLDING THE MEETING

What are the criteria of a legal board meeting? In general, there are two main criteria of a legal meeting. In the first place, all members must have received notice that it was to be held. In the second place, a quorum must be present before any action can be taken.

What kind of notice is necessary? Notice must be either actual or constructive. If the board passes a resolution to the effect that regular meetings will be held weekly, biweekly or monthly, at a certain time and place, each member is held to have constructive notice of all such regular meetings, and no other notice needs to be given him. In the case of special meetings, the rule is different. All board members must be given notice of all special meetings.

What form must the notice take? If the statute prescribes the form of the notice—*e.g.* if it states that it shall be in writing or that it shall be sent by registered mail—the statute is generally held to be conclusive of the matter, and notice that takes any other form is not adequate. Thus, where the statute required that notice be in writing it has been held that notice by telephone did *not* meet the requirements of the statute. Where the statute is silent on the matter, courts are generally agreed that all that is required is that the notice be reasonable. In this connection courts have held that notice by telephone is adequate although it has also been held that notice must be in writing.

In general, however, courts appear to be more concerned with whether the notice was actually received rather than with the method of sending it. Thus, where the statute required that notice be given to board members personally, it has been held that verbal notice given to a member of the family, at the home of a board member who was out of town, was adequate. Likewise, where the statute required that notice be given to each member of the board, it has been held that oral notice given to the wife of a board member by telephone met the requirements of the statute. Also, where the statute required that notice be left at the dwelling place or place of business of a board member, notice sent him through the mails was held adequate.

Who is entitled to notice? All board members are entitled to notice, and failure to notify a single member will invalidate the resulting meeting, according to the general rule. There appear to be some exceptions to this rule which should be noted. In the case of a meeting adjourned to another time and/or place, it has been held that no notice need be given—that the fact and record of the meeting at which adjournment was voted acts as notice of the meeting to follow. Where, however, all members were not present at the meeting at which adjournment was voted, it has been held that those absent must be given notice.

If a board member is out of the district and it is known that he cannot receive the notice and be back in time to attend the meeting—*e.g.* if he is on a Caribbean cruise—the fact that no notice was sent him will not invalidate the meeting. Where, however, it was presumed that a board member was out of the district but in reality he was not, failure to notify him did result in negating action taken at the meeting.

Where the statute makes the chief administrative officer of a board an *ex officio* member without a vote, courts are in disagreement as to whether failure to notify him of a meeting is fatal, as far as action taken at the meeting is concerned. To be on the safe side, all *ex officio* members should be notified even if they have no vote.

While all board members must have notice, the requirement may be waived if all meet and all agree to act. Where all are present but some refuse to act, the requirement of notice will not be waived—it is essential that *all agree to act.* In this connection it has also been held that where all board members happened to be

present at a social gathering and agreed to hold a special meeting at a certain time and place, notice could be dispensed with. The agreement was held to take the place of notice. With reference to the waiving of notice, it has also been held that a board rule to the effect that notice of a special meeting need be given only to a majority of the members is not a valid rule. The board itself is without authority to take any action that has the effect of waiving notice.

Where the statute requires that the public be given notice of board meetings, courts will require strict adherence to the statute. Nevertheless, it has been held that where the date for a special meeting was set at a regular meeting of which the public had notice, no other notice of the special meeting was required.

What must be included in the notice? The notice must specifically include information concerning the date, hour and place of meeting. In addition, it must state the reason for the meeting, *i.e.* the nature of the business to be transacted. No business other than that mentioned in the notice can be transacted if any objection is raised. Of course, where all members are present and none objects, any action may be taken in addition to that mentioned in the notice, and such action will be considered legal. In such a case, the situation is equivalent to that of a special meeting where all are present and all agree to act, which is legal in the absence of notice.

Who may give notice? If the statute is silent on the matter of who is responsible for giving notice of a special meeting, the law is not clear. Nevertheless, it is generally agreed that notice can be given only by someone with authority. A third party with a vital interest in the matter that is to be considered at the meeting has no authority to give the notice, even if instructed to do so by one in authority. Where the statute places the authority to call such meetings in the hands of a particular person, such as the secretary or chairman of the board, courts disagree as to whether he can delegate this authority to another member of the board. In one case, where the rules of the state board of education made it the duty of the secretary to call a special meeting when requested to do so by the president or by a petition signed by three members of the board, it was held that a special meeting called by three members was legal when both the president and the secretary were out of town.

How much notice must be given of a special meeting? In the absence of statute, the courts hold that notice must be given a reasonable length of time preceding the meeting. What constitutes a reasonable length of time differs with the facts. Where notice of a meeting called for 6 p.m. was received by a board member at 5:45 p.m. the same day, the court held the meeting was legal. In this case the one receiving the notice made no objection and stated, when he received the notice, that he would be present, although it turned out that he did not attend the meeting. Had he objected on the ground that he had not received the notice in time, it is almost certain that the court would have held the meeting illegal. Where the statute requires that notice be given a particular length of time preceding the calling of the meeting, the statute will generally be enforced strictly. Nevertheless, a meeting held the same day on which notice was received has been held legal (even though the statute required 24 hours' notice) where the business transacted was of an entirely ministerial nature—issuing the call for an election. Had the business been of a discretionary nature, it is doubtful that the court would have upheld the legality of the meeting.

May a board vote to adjourn a meeting to another time and/or place? In the absence of a statute forbidding it to do so, it is generally held that a school board may adjourn a meeting to another time and/or place if it sees fit to do so, so long as it does not abuse its discretionary authority and so long as such adjournment does not operate to the detriment of one affected by the proceedings. Where, however, the statute required that certain action be taken on a specific day, it has been held that a meeting held on that day must result in the action specified—that where the meeting was adjourned to another date, without the board's taking the action required, the meeting held at the later date was illegal, and the action taken was without effect.

Under somewhat different circumstances, however, the courts have held differently. When action was required to be held on a certain day, and some members, but not a quorum, were present, it was held that action taken at a later date was valid. Had a quorum been present, however, it is probable that the courts would have ruled differently.

Where and when must meetings be held? If the statute requires that board meetings be held in the school district, the courts will insist on strict compliance, and any action taken outside the district will be invalidated. In the absence of such a statute, it is generally held that board meetings need not, necessarily, be held in the district—that action taken at a meeting held in the office of the county superintendent, for example, is legal. In any case, whether the meeting is held within or without the district, a required notice must make specific mention of the place where the meeting is to be held.

Likewise, notice must also mention the time of the meeting. Having specifically set the time for the meeting, a majority of the board members cannot take legal action until the hour fixed. Where, however, all members are assembled previous to the hour mentioned in the notice and all are willing to act, there is no reason the meeting may not be called to order early.

In this connection, it has also been held that the fact that some of the members got together for a "caucus," at which they agreed to take certain action, before the hour stated in the notice had no effect on the legality of action taken at the meeting which was called to order at the time mentioned in the notice.

Must board meetings be open to the public? This is a question that has caused board members much concern and trouble on many occasions. Suffice it to say that, apart from the law, good public relations demands that school boards open their meetings to the public. To do otherwise will, sooner or later, result in placing the actions and motives of the board under the cloud of suspicion.

Obviously, if the statute requires that board meetings be open to the public, action taken at a meeting not open to the public is illegal. It is generally held, however, that the existence of such a statute does not prevent the board from "caucusing" or from going into executive session, if it so desires, so long as it takes no action at such sessions. It may meet privately to discuss matters, but, if it

then goes into an open meeting to take action, the action taken will be held legal by the courts, if the board gives the members of the public the opportunity to present their opinions where that right is given them by statute.

If the statute is silent on the matter, then a board need not, necessarily, transact its business at open meetings, unless it desires to maintain good public relations.

What constitutes adjournment? At times, courts have been called upon to answer the questions of what constitutes adjournment and when adjournment actually takes place. It is a general rule that adjournment is an act—an act of separation and departure— rather then a declaration. Consequently, it has been held that action taken by a board after it had formally voted to adjourn but before the individual members had departed from the meeting place was legal. Courts appear to be divided, however, on the question of whether such actions are legal if taken after some members of the board have departed but while a quorum is still present.

What constitutes a majority? While all board members must have notice of a meeting, it is not necessary that all attend the meeting. All that is required is that a quorum be present. The question of what constitutes a quorum is sometimes the subject of litigation. While the legislature may define a quorum as it sees fit, in the absence of legislation on the matter a simple majority constitutes a quorum. This is the common law rule and may not be changed by an act of the board. In determining whether a quorum is present *de jure* and *de facto* officers are both counted or treated alike—*i.e.* all are considered to be officers.

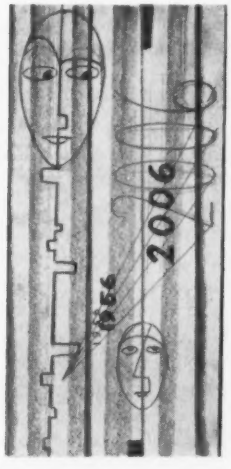
What constitutes a legal vote? As I have said, a quorum can act for the board, and a majority vote of the quorum controls, in the absence of a statute requiring a vote other than that of a simple majority.

From this it is seen that a simple majority of a quorum, which, in turn, is a simple majority of the entire board, can act for the board. For example, if there were 15 members on a school board, and only eight were present, the board could take legal action. If five of the eight, a simple majority of those present, voted in favor of a particular motion, the motion would carry. Thus, it is evident that a minority of a board can take action that will bind the board. But even a majority vote of those present is not necessarily essential to bind the entire board. The courts generally hold that, if a quorum is present, the board is bound by a majority vote of those voting on a particular question. Returning to the example just cited, if eight were present, but if, on a certain question, three refused to vote, then a majority vote of the five actually voting would be decisive. In this case, then, it is evident that three board members could actually bind the entire board of 15 members. In such cases, the courts reason that refusal to vote is to be interpreted as acquiescence with the vote of the majority. This rule, that all that is needed to pass a motion is a majority vote of those actually voting, if a quorum is present, has been held to apply where a dissident element of a board withdrew from the group, mixed with the spectators, and failed to vote when the vote was called for. As long as they remained in the general area of the meeting, the court held a quorum was present and all that was required was a majority of those who actually voted.

When, however, the statute requires a majority vote of all board members, or of those present, the situation is different. Under such conditions, a refusal to vote is not considered as acquiescence with the majority voting. It is, in effect, a negative vote.

In counting votes, what is the effect of a blank ballot? In general, a blank ballot has the same general effect as a refusal to vote. In other words, it is not counted in determining the number of votes cast for or against a proposition or in determining the number cast—the number used as the basis for determining the necessary majority. It is of no effect in arriving at the results of the vote. A spoiled or improperly marked ballot, so it is generally held, is considered to fall in the same category as a blank ballot. Where, however, the statute requires that, for a motion to pass, it must be approved by a majority of the members present, a spoiled or blank ballot, like a refusal to vote, is not considered as acquiescence in the acts of the majority voting.

Next month an article by Dr. Garber will explain the legal requirements for keeping a record of the school board's actions.



Let's make a date for 2000 A.D.

IT SHOULDN'T BE TOO HARD to keep such a date! By that time people may be living to the age of 125, still in full physical and mental bloom.

Let's make a date to visit schools. The old blackboard rests in peace in the school museum. Watch its successor, general writing space: It's erasing itself (the erasure time preset by the teacher). Look—on every child's desk is a little TV viewer! Some of the children are watching and hearing lessons originating in the classroom. But these pupils are tuned in on Washington; those, on Moscow. Several enterprising boys are in touch with Outer Space. Come, let's hop a ride in the helicopter taking students on a visit to the farm.

Do these glimpses of the future seem fantastic? Not to J. Hartt Walsh, dean of the college of education at Butler University. In the next issue of *The Nation's Schools*, Dean Walsh will catapult readers into a new century.

Chalk Dust

FREDERICK JAMES MOFFITT

MARCH MADNESS

Comes the moon of war and madness
And the sachem Akwasasne,
He who teaches future warriors,
Trembles at the noisy clamor,
Looks askance through his bifocals.
Lo! his learning lodge is emptied
And his lessons are discarded
As the madness grabs his young ones
And a spell falls on their elders.
Yea, a jumping, shouting madness
Hits the air with yells and war cries
And the youth dash yon and hither
Filled with zest and perspiration
As they chase great globs of leather,
Wildly toss inflated bladders,
Seeking to outjump each other
In their zeal to hoop the basket.
Pity poor old Akwasasne,
Who was wont to lead our children,
He can't even lead the cheering,
He can't even hit the backstop.
Does he beg for extra teachers?
Plead for bigger books and budgets?
"Get a coach," they mock him rudely,
You must win the game with Deadrat."
Once the tribe was pleased and happy
When he raised young minds to stature.
Now they shout, "Forego the rule book;
Get some kids with extra cubits."
Formerly his friends and neighbors
Praised his buildings and his classrooms.
Now they hold their nose and mutter
"He has undersized gymnasia."
Every day is filled with fracture,
Every night is filled with fracas.
Jousts and tournaments and whingdings
Mark the Battle of the Beanpoles
In each hamlet, town and city
(Not to mention Indiana).
Ever hopeful Akwasasne
Murmurs, "It can't last forever;
This will pass and be forgotten.
There may come a chance for learning
There may come a few days' study
Till the baseball season opens."
But the yells and whistles mock him:
"If you hope to save your carcass,
If you want your scalp unbloodied
You must win the game with Deadrat."



Chalk Dust, adopted son of the St. Regis Indians, Wolf Clan, with the name of Akwasasne, meaning "He Who Leads Our People," dramatizes the superintendent's public relations method, i.e. the honey-vinegar technic. The turtle-shell rattle attracts the victim, whereupon the war club can be used more effectively.

SUPERINTENDENT FIXIT

BECAUSE OF THE COMPLEXITIES of his daily job, the school administrator has always been a captain in the growing army of "do-it-yourself" fans. Nevertheless, it should give a superintendent pause to learn that last year more than 600,000 persons suffered disability injuries because of their eagerness in minding other people's businesses and doing it themselves. Injuries to school superintendents included electric shocks, explosions and scores of plain old-fashioned thumb mashings. They seem to delight in trying to do everything from fixing the broken windows before the taxpayers discover them to acting as dogcatchers and expert piano movers in the absence of more efficient janitors.

A newspaper reports that a school superintendent was recently found stuck in a furnace flue, although the story does not say whether he was repairing a leak, using it as an escape route, or had merely crawled in for a few precious moments of solitude and meditation. Another report tells of the school head who volunteered to teach the swimming classes during the illness of the regular instructor. He was a fine superintendent, too, they say, and the community remembers him with affection. Personally, how many superintendents can you name whose arms or legs have been broken on the football field because they forgot that it was more than 20 years ago when they made that wonderful record as manager (nonplaying) for old Siwash? You know of one such "do-it-yourself" at least!

But, in general, school administrators should let the "do-it-yourselfers" do it themselves. There are hazards enough in the profession, what with Mrs. Busty, the P.T.A., and these new Citizens Committees, without going out of one's way to ask for more of the same.

« »

SO IT HAPPENS

IN ATTEMPTING TO EXPLAIN what makes an efficient school administrator tick, a recent issue of the *Educator's Dispatch* packs it in a mouthful. "The leader in education," says this contemporary, "does not wait for things to happen. He causes things to happen and continually keeps explaining what is happening."

Let's examine this statement as calmly as our ulcers will permit. Certainly, from long observation, most school superintendents expect something will happen. It is true that some don't wait for things to happen. They don't have to. Things happen anyway. If one waits, they happen. If one doesn't wait, they happen. Things in the school business happen, period and/or usually question mark.

The baby boom happened, with or without you, didn't it, and why didn't you build that building when the bond issue was defeated? And, by the by, what happened when you upped the budget last year? It is true, too, that it so happens that the good school administrator causes things to happen which sometimes turn out shouldn't have happened to a dog. He causes his curriculum to happen, and too often it happens that the community agrees that it never should have happened.

So, naturally, he has to keep explaining what happened. He had better keep explaining fast, or something not entirely unexpected will happen to him which he didn't think would happen just when he is convinced that nothing is going to happen after all.



A.A.S.A. Convention Sounds a New Note

Fifteen-page digest of Atlantic City meeting

UNDER skies mostly brilliant, beside a sea playful and sparkling, the A.A.S.A. on February 18 to 23 held its 1956 revue in strange yet familiar Atlantic City.

If the light shed by monologists at most general sessions was less intense than true brilliance, if all 81 discussion groups didn't exactly dazzle the customers or roll them in the aisles, it was a convention well out of the ordinary.

Of its advanced styling, the most unbehindest cut of all was an educators' version of an applause meter. Hardly had the final curtain been rung down when a group of evaluators huddled heads—bald, gray and crew cut. Based on audience reaction and individual scouting, the huddle decided where spotlights should be shifted, where the dialog needed sharpening, where a new tune or technic might be inserted to elevate the score.

As a result, the 1957 production—on the same stage—is bound to be even better box office. This year's paid admissions totaled more than 19,000, including administrators, pro-

Pictured at the top of the page are 11 men out for a Sunday afternoon stroll on the Boardwalk. From left to right, they are: C. C. BYERLY, first assistant superintendent of public instruction, Illinois; M. M. CRUFT, J. FRANK SHORT and LEWIS HOLLMEYER, all assistant superintendents of public instruction, Illinois; HANNON SAYES and A. B. COCO, board members, Avoyelles Parish, Louisiana; M. D. MORTON, board chairman, Toronto, Ont.; L. O. CAMPBELL Jr., board member, Bunkie, La.; A. BRUCE DENNISTON, superintendent, Altoona, Pa.; NORMAN MILLER, superintendent, Tyrone, Pa., and RAYMOND F. GETTY, superintendent, Huntingdon, Pa.

If I were setting convention dates—



"I'd avoid February because our legislature is then in session biennially."—PEARL A. WANAMAKER, *state supt., Washington.* . . . "I'd let matters stand. The advisory committee polled the members, and February is first choice. Early February is too close to the start of the semester. Late February crowds the New England town meetings in March."—WORTH McCLURE, *A.A.S.A. executive secretary.* . . . "We'll come to the A.A.S.A. no matter when, where or how."—BORGHILD HELGESEN, *adm. ass't, state supt., Washington.*

If I were making up the program—



"I'd continue the discussion groups. But as a delegate I'd wish I were several people so I could attend more of them."—ROY STUFFLE, *supt., Rockport, Ind.* . . . "I'd send the entire convention program to A.A.S.A. members a month in advance so they could decide what sectional meetings they would like to attend."—RAY GOLDMAN, *supt., Huntingburg, Ind.*



"I'd favor having discussion groups on the same topic several days as they're doing this year."—LOREN EARLY, *supt., Lisbon, Ohio.* . . . "I'd realize the exhibits play a very important part. We're building a new elementary school, so I'm especially interested in equipment exhibits this year."—BOB FOWLER, *supt., Cadiz, Ohio.*

fessors and teachers, researchers, board members, and exhibitors. The registration set an all-time high.

The new note of 1956 was the continuity given certain major administrative problems. Controversies over reading—a lift to staff morale and staff performance—report cards in their very latest designs, fabrics and trimmings—livable, lovable and economical school buildings, these subjects, introduced on Monday, were still being chewed on on Tuesday, Wednesday and Thursday. In this way everybody had a chance to get to or into at least one discussion group on each problem, and if the vast halls assigned to these groups were not vast enough, the latecomers could jolly well stand up, and stand up they did but not always so jolly or so well as their small pupils might have done.

At the meetings, superintendents generally seemed intent on personal stock taking. They were trying to get it clear when decision making was their job and theirs alone and when decision making should properly take place at all points along the line and as close as possible to the place where the decision would be put into effect. Often they sat at numbered tables and threshed the subject out in true mid-century technic. They worked hard to go home wiser.

On Wednesday morning President Henry I. Willett introduced the incoming president, Paul Misner, superintendent at Glencoe, Ill., and other incoming officers. The tellers announced that, by mail ballot, Philip J. Hickey, superintendent in St. Louis, had been declared president-elect.

Only one of the resolutions adopted caused nervous apprehension. Passage of the rest was fairly cut and dried. The subject of the one any Alabaman can guess. It called for moderation on the segregation issue on the ground that if the association took a militant stand the cause of integration might lose rather than gain ground.

Wednesday evening the Associated Exhibitors put on a gala evening, as is now expected of them. Their president, Lois M. Corbeil of Chicago, presented graduate scholarships to M. K. Berner and M. L. Rafferty and the American Education Award to Edward M. Tuttle, executive secretary of the National School Boards Association. The entertainment feature was Fred Waring and His Pennsylvanians in the Broadway hit "Hear! Hear!" Straightway it became a Boardwalk hit.

It was not within the province of the convention evaluation committee to decide how an editorial staff could cover all the meetings listed in 51 printed pages of the official A.A.S.A. program. The NATION'S SCHOOLS hasn't figured that one out either. In the following pages we have done what we could do.

Reading controversies

PHONICS is a fighting word in some quarters, but in four successive days of wrestling over reading instruction school administrators, teachers and researchers didn't draw any blood. Phonics, why sure! It's "one of several essential aids in the accurate independent recognition of words." It's one of several areas in which research is greatly needed, others being reading readiness, use of films, film readers and other aids, causes of reading failure, and the significance of emotional problems in reading difficulties.

Gwen Horsman, director of reading in the Detroit public schools, said on the opening day that "the act of reading is so complex a skill as to be considered the most difficult avenue of learning." A mere calling of words in sequence cannot be called reading, she continued. When properly taught, reading establishes a relationship between the printed page and daily living.

People used to evaluate reading ability in terms of personal judgment, William S. Gray, director of research in reading and professor of education emeritus at the University of Chicago, told an audience of a thousand or so, some of whom took the whole discussion standing up.

Today the superintendent makes use of a battery of measures: the children's interest in reading activities; the amount of personal reading they do; the uses they make of the ideas read; their achievement in relation to their own capacity and other learning potentials; their ability to use reading effectively in achieving various purposes both in and out of school.

Dr. Gray declared that reading textbooks have to be kept up to date by very frequent revisions. The materials must be timely and relate to the common interests of large groups of children.

Even though the average reading ability of children is a little above that of previous decades, it is true that many teachers are not adequately

prepared to handle large classes and to present diversified materials which interest boys and girls, Paul A. Witty, professor of education at Northwestern University, asserted. Dr. Witty also stressed the need for continuity of reading instruction, including reading programs at the junior and senior high school levels.

Cecil E. Spearman, superintendent at Hinsdale, Ill., and Arthur H. Rice, editor of The NATION'S SCHOOLS, were interrogators at the opening session on current controversies in the teaching of reading. They confronted a panel of experts with 20 questions submitted in advance by members. And by Thursday noon the bitter-enders were still subjecting the teaching of reading to a clinical analysis.

Public concern over 3 R's

THE hullabaloo about reading seems to be on the wane. The chances are that now we are going to hear more gripes about penmanship."

Supt. Raymond H. Ostrander of Mineola, N.Y., told a Wednesday group that the public will soon be out gunning in regard to the other two R's, along with spelling.

In fact, Mr. Ostrander knows a teacher who is just lying in wait for a parental attack on her teaching of penmanship. For months she has been clipping parents' signatures off excuses and notes. She mounts them and opposite each she pastes the signature of the son or daughter, taken from daily work. You've probably guessed that her fifth graders write more legibly than do their parents. However, Mr. Ostrander and other discussants think that this is no time to be smug about teaching the skill subjects.

Arithmetic is more and more being taught in situations that have meaning for the children. Since the schools have not made the reasons for this clear to parents, many parents have the idea that their children are playing, not learning, in school. "The findings of research on the way in which learning is transferred most efficiently need translating into popular language," Mr. Ostrander pointed out.

Schoolmen can assemble facts to prove their critics err, and there is a place for defensive material. Mr. Ostrander, however, advised school spokesmen to get off the defensive and onto the offensive.

"Admission that accomplishment is something less than perfection will inspire public confidence," Mr. Ostrander asserted. "In those glowing, slick-paper pictorial brochures we call annual reports, didn't we try to give the impression that ours was the utopian school system? With such a document in her living room, why shouldn't Mrs. Jones expect her Jimmy to attain perfection in his arithmetic?"

Reporting to parents

A MORE than capacity crowd sat and stood in Room B Monday afternoon to listen to a report on current practices in promotion, pupil evaluation, and reporting to parents.

David S. Jenkins, superintendent of Anne Arundel County schools, Annapolis, Md., said his staff feels its work on reporting to parents represents a continuing effort toward an ever receding goal. But it is trying.

Mr. Jenkins reviewed reporting practices in Anne Arundel County since 1907. In 1953 a new elementary reporting system was adopted. Formal cards issued in November and June were marked "S" (satisfactory) and "N" (needs improvement). A check list on a separate sheet provided for the pupil's own evaluation. A parent-teacher conference was held in January.

This program aroused opposition from professors of the U.S. Naval Academy who were interested only in academic achievement for their children. Annapolis parents before asking redress or conferring with the board of education held a series of public meetings and tried to organize groups of protesting parents in all sections of the county. They introduced in the legislature a bill, later defeated, that would have forced a uniform system of reporting on an "A," "B," "C," "D," "E" basis throughout the entire state.

The county board decided to take its case to the people. It appointed a group of lay citizens, including a naval academy professor, to investigate the entire affair, with a free hand as to procedure. It also organized additional parent study groups throughout the county, gave them necessary literature, and agreed to pay expenses of consultants. The board promised that every single recommendation made to it would be considered before its final decision was made.

In the summer of 1954 the board adopted a revised reporting program which enlarged upon ideas previously held; the administration's philosophy

If I were a magazine editor reporting this convention—



"I'd try to cover the highlights of the discussion groups that hit home—like federal aid and salaries."—JOHN J. MULLEN, *prin., Wharton, N.J.* . . . "I'd not give so much attention to the general session speeches but I would try to give good reporting to the smaller group sessions."—CLARENCE YENTEMA, *supt., Florham Park, N.J.*

If I were asked to solve the teacher shortage—



"I'd raise salaries. Most New York State schools pay fairly good salaries, but not all of them, and not high enough salaries."—GEORGE GROVER, *state ed. dept., New York.* . . . "I'd raise salaries. Salaries in Pennsylvania are not nearly as good as they should be. I guess we rank about 14th in the nation."—GEORGE E. BAKER, *ass't supvg. prin., Fort Cherry Jt. Sch. Dist., Hickory, Pa.*

If I were superintendent again—



"I'd find myself with the same complexity of administrative problems I have as H.E.W. undersecretary. Our department has 45,000 employes, and a budget of $2.6 billion. A school superintendent in a big city is confronted with the same interests and concerns."—HEROLD C. HUNT, *undersec'y, Dept. of Health, Education and Welfare,* with MRS. HUNT.

A FEW LINES ON THE CONVENTION



"YOUR ROOM SHOULD BE READY BY LATE AFTERNOON, SIR."

"I WAS HONORED BY A SEAT ON THE PLATFORM AT THE OPENING GENERAL SESSION."

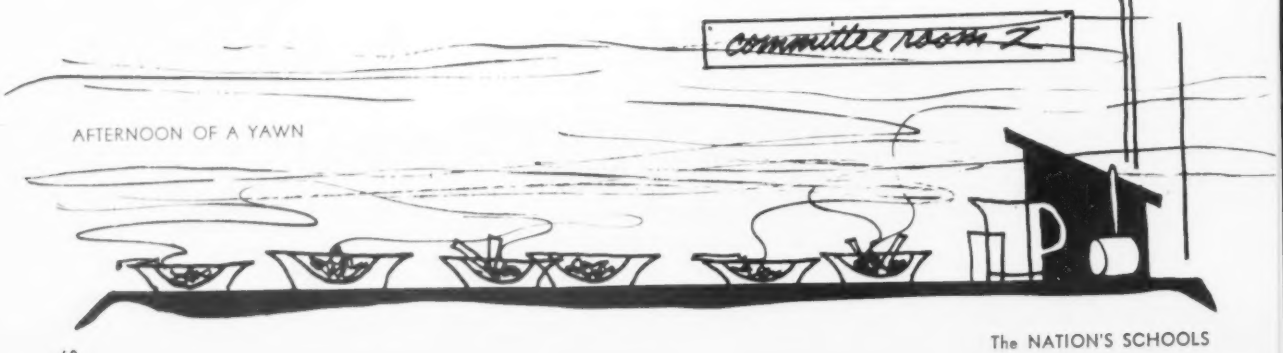


"IT MUST BE DELIGHTFUL HERE IN AUGUST."



WE WANT CARTS





AFTERNOON OF A YAWN

of education was fully recognized and accepted. The lay commission recommended that items be added to report cards so that they could be better understood by parents. It also approved the right of the board and its staff to experiment, undertake research, and institute changes.

At the present time teachers are continuing to work on various problems in workshops and through research projects. Parents and teachers are cooperating to recognize problems, diagnose their causes, and find satisfactory solutions.

Human relations technics

CONFLICT is inevitable in all jobs, the school administrator should remember on bad days. More to the point is it for him to recall that he must deal with conflict at the highest possible level of statesmanship.

The humanics of administration—note the new word; it's probably pedagese—came in for considerable attention at the convention. It was Richard Wynn, associate professor of education at Teachers College, who gave the advice on handling conflict situations; he admitted he had borrowed heavily from the Quakers.

No. 1 technic, naturally, is the open mind. Another good one is to use questions rather than arbitrary statements in leading discussions. Keep reviewing the areas of agreement and build from there is a third. Don't hurry. Take time for the right decision to emerge. Sometimes the best decision is no decision at the particular time. Wait 24 hours before you mail that scorching letter. If you are to call someone on the carpet today, schedule it for tomorrow.

Work with small groups rather than large. Don't play the dominant rôle. Try for a unanimous decision. Ramming through a majority vote is decision making on a rather primitive level; it leaves the minority unhappy. Quakers have been arriving at unanimous decisions for centuries. Juries, also. It's even possible with school boards, for Dick Wynn cited an example in suburban New York.

Leadership technics

MAKE and keep regular dates with your best self."

On that note, Van Miller, professor of education at the University of Illinois, set off a lively discussion group on "Finding Time for Leadership."

"The poorest part of the administrator's schedule of appointments consists of the appointments he makes or fails to make with himself," Dr. Miller remarked philosophically. "Typically, administrators use what time is left over for themselves. If they are conscientious, none is ever left over or, if it is, it is virtually worthless because they or too tired out and the time is used in thinking about how tired they are. Studies of great leaders of all times give evidence of the use of some regular quiet time in which to gain perspective.

"Administrators should make fewer speeches and make each one different," Dr. Miller maintained. "When we get a speech so good that repetition is a temptation, we should pass it along to an able staff member who will carry it around the local circuit."

PASS GRIEVANCES ALONG

The audience reacted to some of Dr. Miller's ideas with raised eyebrows and raised voices. The Illinois professor stated flatly that the top man in the school system should not be available to anyone and everyone who wants to register a complaint or a grievance.

"Take a page from commercial enterprises," he advised. "The lady at the exchange desk, the person at the complaint department, the personnel supervisor, the claim adjuster can make sensible minor adjustments and explain the rules without distracting the top man from priority work."

Carrying this point one step farther, Dr. Miller declared that people with complaints and grievances are selfishly or personally involved and this spurs them on to speak even when their message is unwelcome. But those people who have altruistic ideas or suggestions are hopeful of an audience but not demanding. Unless the administrator finds time to see what their idea is and how it can be fairly tried in the school system, the idea withers in the bud.

Besides giving time and attention to staff and community people who have ideas and willingness to serve, the administrator needs to organize leadership training within his school system. Exploratory assignments for interested staff members, apprenticeship or internship arrangements, voluntary study and action groups, and organized discussion groups are possibilities. In such groups, the emphasis must be on appraisal and development of the school and community rather than on how to control the school and community, it was agreed.

ON-THE-JOB GROWTH

Are you physically tired? Do you have indigestion from gulped meals? Have you no time to be alone and think? Has it been weeks since you've had a good laugh?

For the remedy, ask yourself. For the results, ask Supt. Carroll F. Johnson of White Plains, N.Y., and he will tell you that, under such circumstances as the foregoing, you are not going to have the emotional balance and spiritual stability required for either professional or personal growth.

Dr. Johnson set off a Monday discussion group on inservice growth with some simple but slightly unorthodox suggestions. His theory is that bridge lessons might win the superintendent greater respect from a citizen or board member. He thinks a citizen might listen to a superintendent's suggestions on teachers' salaries or bond issues if the administrator demonstrates mental agility in a completely unrelated area.

Furthermore, Dr. Johnson holds that the school administrator had better take time to keep himself abreast of goings-on in his locality, his country, and the world. "Knowledge of our social and historical and political milieu is part of our 'growing edge' if we are to progress while in service."

If the administrator is going to become a leader he must have integrity, which Dr. Johnson defines as "unimpaired moral sense." He shouldn't be able to fool *himself* about his motives, his goals, or his methods.

The leader must like people, enjoy being with people, and respect other people's rights and opinions.

"This business of trusting people, getting along with people, delegating authority, and allowing a 'situational leader' to take your chair brings me to another attribute of leadership, which is courage," Dr. Johnson declared. "Group decisions are fine. Two heads are always better than one. Situational leaders often deserve free rein. Running clubs, associations or schools by committee decision has the earmarks of democratic organization. But there is such a thing as abdicating leadership responsibility. It takes wisdom to tell the difference. It takes courage to stand alone, even when you know you are right. A leader has the ability to make decisions and not let the consequences gnaw at him."

School plant picture

THE school building is more than a storage bin for kids. In proof of that statement, some 800 architects and school administrators got together Monday afternoon and saw beautiful colored slides of new school plants and heard two architects, William W. Caudill of Texas and John Lyon Reid of San Francisco, assess the requirements and responsibilities of school planning.

When the room lights went on and the audience filed out, architects had convinced schoolmen that there are no stock answers, no stock programs, and no stock plans to cover all school situations. As Mr. Caudill declared: "It takes a problem solving approach carried on at the local level to produce the right kind of architectural answers."

The old idea of a school building as a shelter has been vastly modified. The clients, aged 5 to 20, must now be protected from excessive light, extraneous sound, and too much heat.

The small client, too, must be provided dynamic space and equipment to carry out an efficient work and play program. Moreover, the small client is entitled to work and live in an atmosphere of beauty and relaxation while at school.

Mr. Caudill's heart does not bleed, he told his hearers, for the downtrodden superintendent who keeps putting off his building program until he finds someone or some gimmick to do his thinking for him. He's the guy who says, "Why can't our architects make up their minds and give us a standard classroom?" He falls for the sucker bait found in unethical advertising: "Our school can be built for one-half the cost of ordinary construction."

"Yet there isn't a gimmick, construction technic, material, plan or a man alive that can reduce construction cost by one-half in this day. Our stock plan thinking friend is waiting for the perfect prefabricated classroom to come so that he can build his high school. Yet the guy should know that the ordinary classrooms in a high school amount to less than one-fourth of the total construction cost."

Said John Lyon Reid: "It's the school district's responsibility to form an effective educational program rooted in the requirements and opportunities of the local region. The district must have the courage to request from its public vast sums to provide the best educational program. It's easy to gain public acclaim by demanding initial economies that will prove costly by failure to provide rich educational offerings.

"The community has the responsibility to give the school administrator the responsibility of exercising his responsibility—to make education a meaningful part of community life.

"The architect's responsibility is to house the educational process safely in a functional building. This building must be an architectural asset to the community; it must represent a wise investment of public monies; it must strengthen the hand of the teacher in her work; it must adapt itself to improvement in teaching technics."

In the colored slides the audience saw installations of aluminum louvered skylights to convert classrooms into movie theaters; outdoor swimming pools protected from the wind by demountable screens made of venetian blind slats, with color added; mural art on a building exterior, the work of a small town local artist; classrooms made beautiful through the interweaving of a number of materials; glare controlled through a new type of glass that permits only 12½ per cent of the light to get through; "playful" space dividers; a curvilinear skylight winding its way along a narrow school site; potent relationships between landscaped areas and school buildings, and other colorful features.

LARGER CLASSROOMS

"Classrooms must be made larger, and these larger classrooms must be properly equipped to teach effectively much larger class groups—all this because there aren't enough teachers to go around."

That is the sober message of A. J. Foy Cross, director of placement service and professor of education at New York University.

In these larger classrooms must go light control, healthful air conditioning, and proper wiring, Dr. Cross contends.

The modern classroom should have not only enough well controlled light (from 50 to 70 footcandles at the working surface) but light control devices of a type by which the teacher can quickly reduce the light in the room, a Tuesday afternoon discussion group was told.

If we were really serious about getting our money's worth out of schools we build today, we would insist on provisions for complete, automatic air and temperature control.

Modern schools with up-to-date instructional procedures are "electrified." Without an adequate number of outlets in all walls of the classroom, flexibility of group work, which utilizes projectors, recorders and radios, is seriously curtailed. Similarly, modern education says that 1956-built buildings should be wired for broadcast and closed circuit television.

Elementary school picture

NO ONE knows for sure what is happening to the elementary curriculum. Because schools are controlled locally, it is possible only to sense trends, not to state flatly that they exist.

With this reservation in mind, Harold Drummond, professor of education at George Peabody College for Teachers, Nashville, Tenn., went on to report what does seem to be happening.

1. There is a change in decision making procedures. Twenty years ago specialists—"people who hadn't actually taught any children for many years"—planned the curriculum, which was then handed to the teachers by the administration. Now teachers are accepted as the key persons in curriculum making; elementary school principals have been given increasing responsibility for curriculum leadership, and parents and even the children are consulted.

2. There are changes in content. Foreign language instruction is rapidly being accepted, especially for the gifted. Dr. Drummond suggested he'd like to see a school teach children a different language — French, Spanish, German, Russian, Urdu or what you will—every year from the third to the eighth grade. At the same time the youngsters would learn about the country, customs and culture of the people whose language they were studying. Then in the eighth grade they would choose the language in which they would specialize. One skeptical member of the audience suggested this would produce a Tower of Babel.

One trend Dr. Drummond fears really is a *trend*—the athletic programs of high schools are gradually moving into the upper elementary grades.

3. At the same time, there is a trend back to sure-fire—"look how well I turned out"—methods and a growing realization of the importance

of the emotional climate of the classroom and of the teacher in learning.

4. There is a developing maturity concerning curriculum, an increasing realization that a combination of methods may be the best rather than one method to the exclusion of all others. Teachers differ as children do, and they can't all use the same method effectively.

Dr. Drummond deplored the fact that until recently many teachers and administrators were trained, not educated. These teachers could not defend their methods and so would abandon them under attack; these administrators knew all about buying floor mops, but they were not thinkers or educational philosophers.

However, he believes that inservice training programs, many more effective than college programs, are today helping turn these trained people into educated ones.

High school picture

THE nation's cry for more youngsters trained in the physical sciences and mathematics is falling on sensitive ears, a Thursday morning clinic made clear.

Finding teachers and finding students are both problems our high schools must meet. Recruiting students is possible with a little effort. A Texas study shows that at least one-third of high school pupils could handle three units of science with success.

Larger high schools are finding science teachers, although not always qualified science teachers, but many small schools no longer offer physics because there is no one to teach the subject. Their principals seem to have given up hope. With chemistry, the picture is brighter.

Other high school subjects that need more administrative push are driver education (to prevent murder on the highways) and more language teaching, the moderators, panel members and audience agreed.

Present and future political and economic developments demand persons with language skills, but our high schools are not making the adjustment to meet this need.

J. G. Umstattd, professor of secondary education at the University of Texas, gave a word picture of today's high school in the United States:

"Society asks us to serve all children and youths from the moron to the genius. Thousands are in high school today who would have flunked out of trade school a few years ago. But Mamma and Papa American want Johnny passed each year and sometimes Papa, or even Mamma, is on the school board or a friend of the school board president. So Johnny is passed. Also, educators know that Johnny will get more that way than if he became retarded and hopeless. The only American solution is to adjust the school program to Johnny's ability.

"For the less able our solution is one of adjustment of the program both in content and method, and in rate of progress. We keep an eye on subprofessional jobs and give basic training that will lead to technicians and engineer aides. We reach still lower in the ability barrel and train for positions in semiskilled labor, maids, cleaners, laundry help and whatnot. From the other end of the ability curve we are now in a nationwide drive to educate the gifted to the optimal degree."

At a session on driver education, it was reported that the cost of courses in driver education was $33.32 per student trained in 1115 high schools last year.

Panelists agreed that classroom experiences should be coordinated with experience in the car, as teachers do not teach only attitudes and knowledge in the classroom and merely manipulative skills in the car.

HIGH SCHOOL-COLLEGE RELATIONS

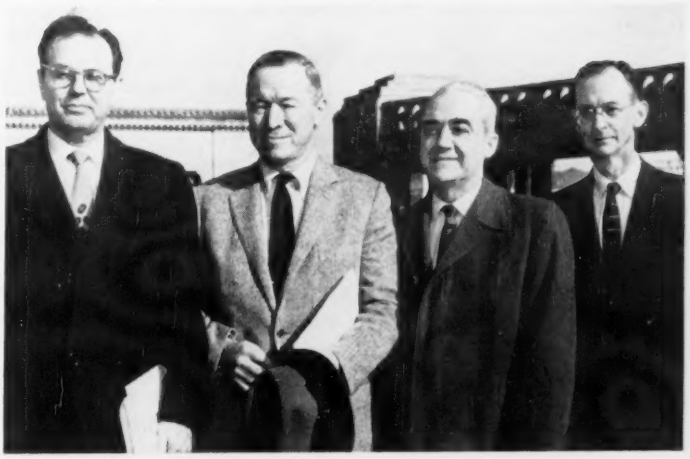
THE way to bring about better coordination between high school and college instructional programs is for representatives of high schools and colleges to sit down together and try to work out their problems together.

That was the solution suggested at a Monday afternoon discussion session on new trends in high school-college articulation. Another suggestion was that college and secondary school teachers (of senior classes) exchange positions for three or four weeks occasionally to learn about one another's problems.

William H. Cornog, superintendent of New Trier Township High School, Winnetka, Ill., described the School and College Study of Admission With Advanced Standing originated at Kenyon College in 1951.

"The experience of this study showed beyond question that repeated meetings of subject-matter teachers in

If I were starting a racial integration program—



"I'd start with the people. We started integration at the high school level. Colored children that wanted to come to the white high school could; those that didn't were hauled to a colored school in the adjoining county. Half wanted to be transported there the first year. This year they are all in our white school."—H. BYRON MASTERSON, *supt., Kennett, Mo.* . . . "I'd go along with the community. Our community felt we'd better start integration in the upper two grades of high school—the youngsters there seemed more nearly ready. Only 8 per cent of pupils are Negroes. We started integration in September 1954, and we have had no difficulty."—LYNN TWITTY, *supt., Sikeston, Mo.* . . . "Missouri is on its way in integration. The speed of the program depends entirely on the local community. But the colored students are handicapped in the white schools because of environmental conditions and often poorer preparation."—EVERETT KEITH, *ex. sec'y, Mo. State Tchrs. Assn.* . . . "I agree with Supt. Twitty."—R. BUCHMUELLER, *architect, Sikeston.*

school and college engendered a high degree of mutual respect and cordial school and college relations, which have been lacking in the academic world for over a generation," he said.

William G. Brink, professor of education at Northwestern University, listed trends that appear to be of particular significance:

1. In admissions practices, stress upon qualitative rather than upon quantitative measures alone.

2. Better articulation of guidance services to make them continuous in high school and college.

3. A closer articulation of general education in high school and college to prevent overlapping, to ensure continuity, and to provide programs with both scope and depth of study and learning.

4. The identification of talented youth and making better provisions for their continued education, although a great deal remains to be done in these areas.

5. Increased communication between secondary schools and colleges by means of meetings of representatives from the two levels.

Rural picture

RURAL children no longer have to hitch a ride home on Friday afternoon because the school bus is taking the football team to Centerville for the week's big game.

Many school systems have found out that a special bus is needed for extracurricular activities and they have bought such a bus. Buses are now being used for all sorts of educational purposes without the regular schedules being disrupted.

Wesley Pickel, coordinator of the division of school plant, pupil transportation, and special services of the Tennessee State Department of Education, told a Wednesday discussion group that the number of accidents on rural and secondary roads is increasing at a rapid rate. Bus drivers must be particularly well qualified to meet the requirements of safe operation of buses under the most difficult conditions.

"Children create many problems of discipline on school buses," Mr. Pickel declared. "They must be taught to appreciate the driver's problems. Nor have the drivers been made a part of the recent trends toward greater freedom for children in classrooms."

While the trend in the South is toward state purchase of school buses or the pooling of orders for state bids, Tennessee continues to leave the responsibility for bus purchasing with the local county unit for reasons that it believes are valid, Mr. Pickel asserted.

At another discussion group on rural problems, Lois Clark, assistant secretary of the N.E.A. Department of Rural Education, said that country people are no longer satisfied with education that is second best. However, the specifications they set for their school programs often are inadequate largely because they lack opportunity to see and know what such programs could be.

Miss Clark told her audience that it is possible for a rural school program to be geared to the local community without its becoming provincial. To do this requires broad involvement of citizens, students and educators, she declared.

Internship problems

IT PAYS to be an intern in school administration—but the intern has to wait until a year later before the money rolls in.

Results of research on internships done by the Middle Atlantic C.P.E.A. were reported on Monday by Clifford Hooker, a professor at Pitt.

Economically the "ex-intern" takes a salary leap of more than $1000, and if he is one of the lucky 68 per cent of those studied his salary jumps $4500. But what keeps the poor worker alive while he is interning? Dr. Hooker and his associates contend that the school system in which he is interning should pay him a stipend. Also that anything less than an academic year's internship is inadequate.

School administrators weren't sure that interns would earn their pay. Dr. Hooker said they would if they were better selected and could stay longer. Administrators will have to learn that an assistant can relieve them of a thousand overburdening details.

Administrators said that if they sponsored an intern they would be wrecking staff morale. They like to do their promoting from within, they maintained.

The answer to this, the C.P.E.A. surveyors showed, is for school administrators to take the primary responsibility of identifying men of leadership potential on their own staff and to select such persons in cooperation with the university internship program.

Teacher education

AUTOMATION—how can teachers be educated for this predestined age?

"Give far greater emphasis to the humanities" is the answer of Alvin Eurich, vice president of the Fund for the Advancement of Education.

Dr. Eurich suggested three approaches to a stepped-up humanities program:

1. Base professional education upon the understandings acquired through observation. Any person entering teaching has lived through from 12 to 16 years or more of good teaching practice and poor teaching practice and has learned a great deal that way. In fact, at Cornell University liberal arts college graduates who had never been exposed to a single course in professional education outscored teachers college graduates in the National Teachers Examination.

2. Concentrate, in liberal education and particularly in the humanities, on developing maturity in thinking about the great ideas that have contributed to our civilization.

3. Make our most gifted and inspiring teachers available to the largest number of students through movies, television or other modern devices.

PEACE WITH TEACHERS GROUPS

The school superintendent should be more approachable, the teachers associations should be more trustful, and everyone should be more relaxed.

That's how Moderator James M. Spinning, former superintendent at Rochester, N.Y., summed up a panel discussion on relationships between professional organizations of classroom teachers and school administrators.

Panel members were, representing teachers: Sarah Caldwell, Akron, Ohio; Lucille Carroll, Wooster, Ohio; Erwin L. Coons, Poughkeepsie, N.Y., and Waurine Walker, assistant director, certification, Texas Education Agency, and, representing superintendents: Cyril B. Busbee, Brookland-Cayce Schools, West Columbia, S.C.; T. J. Jenson, Shorewood, Wis.; Mark C. Schinnerer, Cleveland, and Benjamin C. Willis, Chicago.

Mr. Spinning presented actual cases (all occurring in the well known town of X) and asked for comments.

Several members agreed that, while neither a superintendent nor a teachers association should try to take credit for what the other had done,

the important thing was that it did get done, not who got the credit.

Applause greeted Miss Walker's statement that, while teachers organizations must do all they can to help misfits, when a teacher has an adverse effect on children, other teachers must take a stand and try to guide her out of the profession.

At Mr. Spinning's request the panelists listed what they wanted the superintendent (or teachers association) to do that is not being done now.

Mrs. Caldwell: Recognize teachers are adults and treat them accordingly.

Supt. Busbee: Teachers associations should study *all* the implications of any proposals they plan to make to the superintendent.

Miss Carroll: The superintendent should sometimes ask: What do you think? instead of always saying: This is how it is.

Supt. Jenson: Teachers should remember superintendents are human too.

Mr. Coons: Superintendents should recognize the teacher as a truly professional person who needs to make a contribution to her professional organization.

Supt. Schinnerer: Teachers need more self-discipline, which their associations can give.

Miss Walker: I would ask most that the superintendent encourage the potential power found in each teacher and develop her leadership qualities.

Supt. Willis: The qualities of the individual do become known; it is the teacher's competence and devotion in the classroom that impresses the public.

Controversial issues

OUR free society can't advance unless students are allowed to study and to discuss controversial issues in school. No other institution is prepared to give this learning to our citizenry. Nowhere else is there the atmosphere or the time, the materials or the competent leadership necessary for the task.

This was the consensus of a Wednesday afternoon discussion group.

It requires a competent teacher to deal with controversial issues, William H. Cartwright, professor of education at Duke University, warned. "In no other subject field is it so important that the teacher possess intellectual ability and emotional maturity, academic knowledge and pedagogical skill, courage and caution," he declared.

"What must be the thinking of the intelligent school child in a classroom where he is prevented from studying communism or is told that government health insurance would be 'un-American,' even if the majority of the people would vote for it? What will he think if he discovers that a book he needs in order to understand a given problem is not only missing from the library but has been banned? Only those who deep in their hearts do not have faith in truth and freedom could fail to fear restrictions on freedom to learn.

"You can affect the selection of teachers of the social studies," Dr. Cartwright told the superintendents. "You can give the lie to the common belief that school administrators are less concerned about the qualifications of those who teach the social studies than they are about the qualifications of other teachers. You can let your teachers know that you believe in the freedom of American children to learn and that you will support that freedom."

Spiritual values

HERE'S another way America is unique. We have some 97.5 million citizens who profess a religious belief, and they practice their belief under the banner of more than 250 religious denominations. We have more than 65 million citizens who are religiously unaffiliated. The 97.5 million and the 65 million live and work together as free men and women.

"In no society could a common bond of moral and spiritual values—a public philosophy—be more central and more important to individual and social welfare," asserted Lawrence A. Cremin of Columbia's Teachers College, in citing the foregoing figures. "The nurture of such a bond must be a central task of public education."

Dr. Cremin's plan for the public schools' approach to instruction in moral and spiritual values is threefold: (1) to commit young Americans to our public philosophy, a body of values that will stand as a general moral imperative for Americans of all faiths; (2) to provide students in the public schools with knowledge about our heritage of religious diversity, and (3) to give them an appreciation of our heritage of religious diversity.

This Dr. Cremin would do not through any special course but wherever opportunities present themselves naturally in the curriculum: in community studies, in music and art appreciation, in history classes, in arranging for festive occasions. It's the school's business to counter with information and appreciation the misinformation and prejudice that often attend the child's incidental learning, he maintained.

Appraisals from abroad

STUDENTS from 33 foreign countries told superintendents at the Tuesday morning general session what they like and don't like about American schools. The administrators laughed at the way some comments were phrased, but they applauded the boys and girls, too.

The 33 students are in this country under the auspices of the *New York Herald Tribune* Forum for High Schools. Delegates are chosen by nationwide competitions directed by the ministries of education in their own countries each fall. As many as 17,000 students have entered the competition in a single country.

For 12 weeks, January through March, the boys and girls live for two-week periods in the homes of five different American high school students, attending classes with them and participating in a normal program of school and community activities.

Mrs. Theodore Waller, Forum director, was moderator of the A.A.S.A. panel program.

Elizabeth Woodgate said she believes that schools in Australia try to teach students to become individuals; American schools try to educate students to become citizens. But she thinks the Australian high school graduate is just as good a citizen and knows more because of his more intensive academic education.

British Judith Reader agreed. She thinks the drudgery, such as memorization, required in European schools helps produce individuals with the disciplined, intellectually trained minds good citizens must have.

"American education is socialistic," said Johan Jurgen Holst of Norway, because "everyone has a chance to learn as little as his neighbor does."

Several students from Africa and Asia commented that school is taken much more seriously in their countries because there education is a privilege and a rare one. Muhammadu Liman of Nigeria said the few who go to school in his country feel a great responsibility to work hard. To them

If I were writing the resolutions—



"I'd press for a more positive, vigorous approach to school finance. If we don't work harder at both state level and local level, we'll lose ground."—ED THORNE, *supt., West Hartford, Conn.* . . . "I'd take a stand against federal aid. I was for it, but I can see that federal control will begin when federal aid comes. We must find a different tax base—other than real estate. In Indiana, it might be a general sales tax since we don't have one, or a state income tax."—F. A. VAN SLYKE, *supt., Griffith, Ind.*

If I were an exhibitor—



"I'd think the exhibits are well organized—better than they have been the last few years. I do have one complaint—in some cases if you're not a superintendent or a supervising principal exhibitors aren't willing to take the time to show you their full line."—JIM REESE, *jr. high sch. prin., Allentown, Pa.* . . . "I'd have nothing to be unhappy about. This year I'm looking at all types of classroom furniture as we are building a school."—E. PAUL DAY, *supvg. prin., Peters Township Schools, Canonsburg, Pa.*

If I were teaching reading—



"I'd divide the children into achievement groups and go on from where they were. In first grade I'd help build vocabulary. In second grade I'd teach phonics. In fact, our schools have a new language arts program that extends from kindergarten through 12th grade."—HERMAN L. SHIBLER, *supt., Indianapolis.* . . . "I'd review the whole reading program, as we are doing in Glencoe. I think parents are perhaps rightfully troubled about their children's reading."—ARNO R. MYERS, *board president, Glencoe, Ill.*

schools are sacred because learning is sacred.

Heated school buildings impressed Yoriko Konishi of Japan. City schools in her country usually are built in western style, but in the smaller towns schools are unheated wooden buildings. Pupils put on layer after layer of clothing in an attempt to keep warm. "I have never had trouble studying here because I was too cold," she said.

The students think Americans should learn foreign languages but condemn present methods of teaching them as "obsolete." One girl mentioned attending a French class in which not a word of French was spoken. Another said Americans seem to learn foreign languages only to forget them, and they never learn really to speak another language.

Americans can't hope to maintain a position of world leadership if they can't communicate with other people, said Gladys Kerbage of Lebanon. They assume everyone in other countries is studying English—which is not true—so why should they bother to learn foreign languages? But there are unique aspects of any language that are lost in translation.

Jawahir Haji Ali is delighted to have learned a number of "slang languages" here and to be taking back to her school in Malaya a good collection of "slangs." All lessons in Malayan schools are taught in English, and pupils are fined 10 cents for each lapse into their native language. "We have to learn English or go broke," she explained.

A West German student, Christof Bertram, reminded the superintendents that education can be satanic, as the Communists have made it in East Germany. Germans, he said, reject a hot war as a means of solving their problem since it would leave no Germans to unify; yet the cold war is tearing the two sections of the country farther and farther apart, creating not only a German problem but a European one.

What the answer to this and other world problems is he said he did not know, but he thinks education will have to help the world find the answers.

Sec'y Folsom and others

"We should utilize the increased public interest in educational problems to encourage still greater public concern and support—at all levels of government—for the education of our children. We must put research to work on a broader scale so that it will more effectively serve the progress of education. And we must sustain, and never undervalue, the animating force in good education—good teaching by good teachers."

These words were addressed by Marion B. Folsom, Secretary of Health, Education and Welfare, to superintendents at the Wednesday morning general session.

The H.E.W. secretary discussed the proposed Administration bill for federal grants for school construction. It would be "unfortunate for our children if other matters prevent this critically needed legislation from being passed by this Congress," he said. He pointed out that the federal courts are dealing with the problem of integration so that this legislation need not deal with it. "What is needed—and needed now—is schools."

In cooperation with state educational agencies, colleges and universities, Secretary Folsom said, the U.S. Office of Education is planning much needed research on such problems as retaining students in school, the relationship of schools to juvenile delinquency, education of the mentally handicapped, and how colleges will handle increased enrollments in the near future. Also, "to help develop programs to alleviate the teacher shortage, we need reliable data regarding the social, economic and professional status of teachers."

REPORT OF PRESIDENT

"We have done much to sell public education to the rest of the world, for they see a relationship between our high standard of living and the educational level of our people—all of our people, not just the intellectual elite. Consequently other countries are trying the same prescription in rather large doses."

Henry I. Willett, superintendent at Richmond, Va., and president of the

A.A.S.A., finds the universal interest in education encouraging, but he does think it means the U.S. can't afford to be complacent about its own educational picture.

Gen. Carlos P. Romulo, the Philippine ambassador, gave the Sunday night audience a terrifying lesson in geography. He conducted his hearers on a flight to the Orient. Touching down on China, India, Indonesia and Burma, he counted 650 million Communists and 600 million neutrals. Landing at other points he found 119 million Filipinos, Thailanders and Pakistani friendly to our side.

Of those left in Asia—in French Indo-China, Korea and Japan—"who at this time can predict," General Romulo asked, "on what side they will ultimately make their influence felt?"

The intense ambassador laid a heavy responsibility on educators and on Americans generally. "Asia asks of us only that we make our actions coincide with our preachments," he concluded.

The official N.A.M. line—no federal aid to education—was presented by another evening speaker, William J. Grede of Milwaukee, a former president of the National Association of Manufacturers.

Charles Collingwood, CBS correspondent, another evening lecturer, asked schoolmen to teach children a fine discrimination between truth and falsehood so that they can judge the true implications of a wide range of current world and local problems.

Board minutes

TIME wasting and soul trying board meetings are those at which routine discussions wait while the secretary burrows in the bowels of minute books, present and past.

School board minutes should be written and assembled. What's more, they should be periodically revised. That way tempers are sweeter.

Wise reorganization

THE problems of school district reorganization were thoroughly canvassed at a joint meeting of the Division of County and Rural Area Superintendents of the National Education Association and the Council of Chief State School Officers.

Harlan Beem, Southern Illinois University, reasoned that district reorganization could not be considered apart from the problem of the organization of the intermediate unit. He appeared to think of the ideal school district as one that was small enough to retain the interest of the people but large enough to provide a reasonably adequate program. Essential services which the local district might not be able to provide should be made available through the intermediate unit.

Howard Dawson of the N.E.A. said he was disturbed by the tendency to oversimplify the problem of reorganization. It is interwoven with that of finance as well as the intermediate unit. He approved the grass-roots approach but pointed out that those state laws that permit an obstreperous minority to thwart the will of the people must be changed. Sooner or later the time comes when the state must cease to subsidize and perpetuate inefficiency. It must not put too big a financial premium on the small inefficient district, and it must give financial rewards to the reorganized districts. We can reduce per capita costs, he said, as well as the total number of teachers required by wise reorganization.

Public relations

CONTINUING public interest in schools is not the total problem facing educators, Edward L. Bernays, noted public relations specialist, said at the winter meeting of the National School Public Relations Association. The emphasis must be placed on converting the feeling and interest in the schools to more action.

The problem is one of social engineering rather than dissemination of information, he said. Piercing one of the more common beliefs, Mr. Bernays stated that dissemination of information per se actually only intensifies an attitude rather than converting someone to a new attitude. An information program should not be considered as the basis of a movement to action.

"People accept only what they already accept and evade what they do not want to read."

If I were retiring in June—



"I'd play bridge and more bridge. I would stop just long enough to eat, and then I'd go back to playing bridge."—R. S. MORGAN, *supt., Bishop, Tex.* . . . "I would play golf and then I would fish. I would fish and then play golf. Right now I do both but not nearly often enough."—CHARLES A. VAUGHN *Jr., supt., Lake Co., Fla.* . . . "I'd grow citrus—I do that now and also process citrus—and I'd fish for bass. Mine is a private lake in Lake County."—PAUL W. BRYAN, *board chm., Lake Co., Fla.*

If I were running a White House Conference—



"I'd follow the new pattern of discussion set in the 1955 one. I thought it was well worth while."—EUGENE LUSE, *supt., Coldwater, Kan.* . . . "I'd try to get education before the American people by the same means every four or five years. I'd hope the conference would choose a layman to give the final report."—JEFF HANEY, *grad. sch. of ed., Harvard.* . . . "I'd like to see more laymen and women involved. The public suspects that educators and Washington ran the last conference."—M. P. FORKER, *supt., Liberal, Kan.*

In black and white

PURPOSE No. 1 of printed materials prepared for the community should be to inspire confidence," James Redmond, superintendent of New Orleans schools, told the discussion group on "Preparation and Use of Printed Materials."

To bring this about in New Orleans' school publications, Dr. Redmond said, care is used not to make teachers appear foolish in pictures or copy. A feeling of dignity is given to all layout and copy. The grammar and punctuation rules taught in the schools are used.

EdPress luncheon

DO NOT deny editors and writers the right to criticize," Arthur F. Corey, executive secretary of the California Teachers Association, told educators at the annual luncheon of the Educational Press Association of America.

"Education is getting a much friendlier reception from magazines," the speaker told EdPress, "and school people in turn need to develop a little thicker skin."

To those who think that books, magazines and the printed word will be replaced by radio and television, Mr. Corey had words of encouragement. "Remember," he said, "it is the printed message that is permanent. Printing is the only avenue of communication for the noncomformist. In fact, the printed word is more powerful and important than ever before."

Four golden keys

GOLDEN keys (the real stuff) were awarded to President Dwight E. Eisenhower and Addie B. Over of Abilene, Kan., his former teacher, and to Roy E. Larsen, chairman of the National Citizens Commission for the Public Schools, and his former teacher, Stacey B. Southworth of Braintree, Mass., in impressive ceremonies arranged by the National School Public Relations Association and sponsored by six national education groups and agencies.

President Eisenhower's key will be presented to him at the White House this spring.

One of Miss Over's pupils, 12 year old Judy Alford, was sent by the people of Abilene, Kan., to receive a key in her behalf as she was ill and unable to attend.

Mr. Larsen's teacher accepted the gift in person.

In the principal address, Finis E. Engleman, Connecticut commissioner of education, stressed that "tomorrow's teachers must produce products made of even sterner stuff."

They resolved

IN 17 resolutions the convention, besides asking that integration proceed "in the spirit of fair play and good will," as previously noted, gave the White House Conference a pat on the back, paid tribute to Worth McClure, retiring executive secretary, left to the family and the family doctor the primary responsibility for the vaccination of children, asked federal aid for school construction while deploring the Powell amendment, asked that local, state and federal governments share in financing public education, and gave voice to its perennial desire for an independent U.S. Office of Education.

Also the convention went on record as favoring the American way of life, regarding education as a key to lasting peace, asking Congress to interpret American education properly in foreign lands, continuing sponsorship of the C.P.E.A., approving formation of the Committee for the Advancement of School Administration, both pledging support to and condemning mass media of communication, asking that the lot of teachers be improved, recognizing the schools' obligation to teach pupils the basic skills, and pledging itself to keep seeking deep spiritual insight for its members and their pupils.



Evaluation team gathers at briefing dinner. Standing at rear are Lawrence Derthick, chairman of the Committee for the Advancement of School Administration; Hollis A. Moore Jr., executive secretary; A.A.S.A. President H. I. Willett, and A.A.S.A. Executive Secretary Worth McClure.

How Evaluation Plan Is Operating

THE convention was evaluated in three ways. A form was handed to everyone at the Monday morning general session.

The following questions were asked on the form: What do you personally want to get from the 1956 A.A.S.A. convention? What major purposes justify holding the annual A.A.S.A. convention?

After the Tuesday afternoon sessions 150 superintendents selected at random from the membership registration were asked their opinions of various technics and innovations. Also 20 of the discussion groups were evaluated by three-member evaluation teams, each member working independently.

This special research was financed with funds from the Kellogg Foundation and directed by the A.A.S.A.'s Committee for the Advancement of School Administration.

Research Workshop with an international flavor

NINETEEN educators from 10 countries participated in the first international conference on educational research in the history of education. The workshop was conducted prior to and during the A.A.S.A. meeting. Talks by several foreign delegates constituted the principal program of the banquet of the American Educational Research Association, February 20.

A visitor from Moscow, Alexei N. Leontiev, said, through a UNESCO interpreter: "I value highly the friendly, inspiring welcome extended to me. A requisite to the advancement of our science is optimism. I am optimistic that our joint efforts will create methods and procedures for transmitting to children the best achievements of man's culture."

Daishiro Hidaka, director of educational research for the International Christian University at Tokyo, gave a 20 minute talk in Japanese. He told how difficult it is for the Oriental mind to understand U.S. research without an understanding of the philosophy and practices of democracy. Educational research in this country, he said, gets its direction from the values of democracy, and these are not so easily understood in other areas of the world.

Speaking somewhat for the South American countries was Anisio S. Teixeira, director of the National Education Institute at Rio de Janeiro, Brazil. In English, with a heavy Brazilian accent, he said that South Americans, too, have first to understand our ideals of social stability and social action before they get the full significance of our research.

Ben S. Morris, representing Great Britain's foundation for educational research, also spoke.

The workshop was financed primarily by a grant of $10,000 from UNESCO and was conducted and also partially financed by the American Educational Research Association.

Other participants represented Australia, Belgium, Canada, Chile, France and Germany.

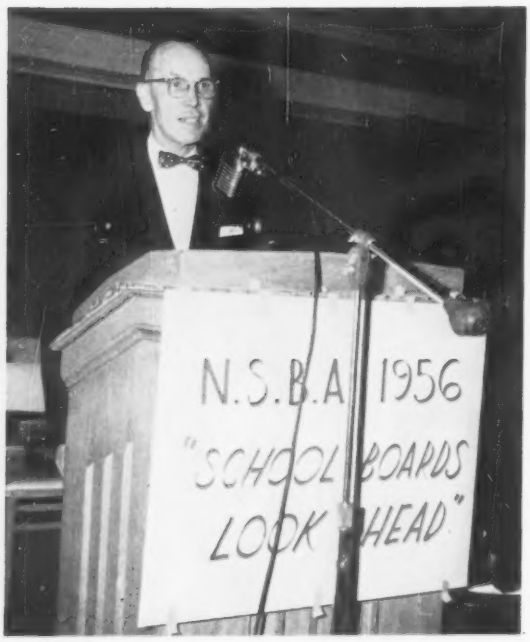
With nine participants from the United States, 19 members were active in the workshop, along with several observers and translators.



Seated: DAISHIRO HIDAKA, director, Institute of Educational Research and Service, International Christian University, Tokyo, Japan; ALEXEI N. LEONTIEV, Academy of Pedagogical Sciences, Moscow, U.S.S.R.; OSCAR BUSTOS-ABURTO, professor of education, Instituto Pedagogico, University of Chile, Santiago; ROGER GAL, chef du service de la recherche pedagogique, Ministere de l'Education Nationale, Paris; ROBERT W. B. JACKSON, professor of educational research, University of Toronto, Toronto, Ont.; ANISIO S. TEIXEIRA, director, Instituto de Estudios Pedagogicos, Ministerio de Educacao e Cultura, Rio de Janeiro, Brazil. Standing: HERSCHEL T. MANUEL, professor of educational psychology, University of Texas; FRANCIS G. CORNELL, educational consultant, New York, and 1956 president of A.E.R.A.; MAURICE E. TROYER, vice president, International Christian University, Tokyo, Japan; FERNAND HOTYAT, directeur de l'Institut Superieur de Pedagogie de la Province de Hainaut, Morlanwelz, Belgium; ROBERT L. EBEL, director, University Examinations Service, State University of Iowa.



Seated: L. R. FERNIG, Education Clearing House, UNESCO, Paris; WILLIAM S. GRAY, professor emeritus, University of Chicago; VICTOR H. NOLL, professor of education, Michigan State University, general chairman of conference; B. A. LIU, head, statistical division, UNESCO, Paris; HELEN M. WALKER, professor of education, Teachers College, Columbia University; ERICH HYLLA, director, Hochschule fuer Internationale Paedagogische Forschung, Frankfurt, West Germany. Standing: PAUL T. RANKIN, assistant superintendent, Detroit; PERCIVAL M. SYMONDS, professor of education, Teachers College, Columbia University; ISMAEL RODRIGUEZBOU, secretary, Superior Educational Council, Puerto Rico; EMIN HEKIMGIL, educational attache, Turkish Embassy, New York; WILLARD C. OLSON, dean, school of education, University of Michigan; BEN S. MORRIS, director, National Foundation for Educational Research, London, England; WILLIAM C. RADFORD, director, Australian Council for Educational Research, Melbourne.



Paul Misner, new A.A.S.A. president, gives major address.

N.S.B.A. Holds Working Convention

in advance of A.A.S.A. meetings, also shared with their superintendents by many board members

As reported by CALVIN GRIEDER
Professor of School Administration
University of Colorado

A YEAR of notable achievement by the National School Boards Association was climaxed by its 16th annual convention, February 16 to 18, at Atlantic City, with a record registration of nearly 1700, exceeding by 50 per cent the previous high marks of 1954 and 1955. Delegates were present from all but one of the 43 affiliated state associations, and board members from four other states as well.

It was a working convention, with many group meetings scheduled, some for problems common to various areas of the nation, some for topics of more general interest. Merit rating and salary provisions recognizing merit commanded so much attention that a special meeting on them was arranged. The relating of salaries to teacher merit seemed to be widely favored.

An air of mild expectancy, laced with some apprehension, that the convention might get hung up on two questions that were in many minds never was fulfilled. The two hot issues of federal aid—in the form of general aid or construction funds—and desegregation at no time came up in the general sessions, and no resolutions were submitted on them.

O. H. Roberts, the retiring president, in his opening address Thursday gave a clue to this situation when he suggested that a study be made "of the best means by which we might interpret our position to others on controversial matters which are important to us." But as of 1956 no one seemed willing to take the chance of splitting the convention, and possibly the association itself, by introducing these explosive topics.

Mr. Roberts cited as the three most significant achievements of the past year the sponsorship of thousands of community conferences on education by the state associations, the Kansas City Symposium (strictly an N.S.B.A. activity), and co-sponsorship of and participation in the White House Conference. In pleading for emphasis on "areas of agreement" and "avoidance of selfish and petty bickering" he emphasized the need for greater cooperation by school boards, administrators and citizens in the interest of better schools for all children.

Only three other addresses were slated, which must be a record for a three-day convention. In his Thursday evening address, Boyd Campbell, president of the U.S. Chamber of Commerce, echoed Mr. Roberts' statement on the need for working together for better schools, with particular reference to teamwork between business and education. "Education," he said, "should vacate the ivory tower and business the countinghouse, so the two can meet on the vast areas of mutual agreement and talk things over."

Paul J. Misner, superintendent of schools at Glencoe, Ill., and incoming president of the A.A.S.A., on Friday evening pointed out that there is still room for improvement in the relationship of school boards and superintendents. He advocated in particular the formulation of written policies, a study by each board of the superintendent's work load and the level of his pay, which recent data show has not kept pace with increases in teachers' salaries or those in other occupations. Strong applause was given to his conviction that "adequate professional salaries for teachers will never be achieved until constructive plans for determining and rewarding superior teaching are developed." To dodge this issue, he continue, "is a disservice to the thousands of superior, dedicated teachers whose salaries are now determined by the common denominator of mediocrity."

It is doubtful if the final point of Dr. Misner's address was given enough weight by his audience. "I am deeply concerned," he stated, "about one aspect of educational leadership at the national level. The N.S.B.A., the newly constituted Citizens Council for Better Schools, and the A.A.S.A. all possess great potentialities for significant contributions to public education. If each of these great organizations is to make its maximum contribution, it is imperative that the programs and policies of all three groups be clearly defined and effectively coordinated. Each organization will do a disservice to the cause we all seek

to serve if our efforts overlap, duplicate and conflict. I should like to suggest that leaders of the three organizations sit down together in the near future in an effort to plot our courses and to explore ways of helping each other."

At the annual convention banquet, Herold C. Hunt, undersecretary of the Department of Health, Education and Welfare, addressed a capacity gathering of a thousand on the subject, "Looking Ahead With School Boards." He pointed out that school boards, administrators and a large segment of the citizenry are today working more aggressively and cooperatively than ever before to solve the urgent problems that confront them. He singled out the N.S.B.A. as a major agency for the improvement of both school board service and educational services. The White House Conference and President Eisenhower's manifest interest in education were cited as evidence that we have moved from a purely local concern for education, followed by joint state and local effort, to a period when education is regarded as a responsibility of all three levels of government.

Dr. Hunt cautioned against excessive preoccupation with the training of scientists, mathematicians and technologists with possible neglect of broader, more liberal schooling. He urged that every child be given a broad acquaintance with the fields of knowledge and be allowed to make his own choice of specialization at an appropriate time for him.

One of the most stimulating general sessions occurred on Thursday afternoon, when a well prepared panel of five discussed various points arising from the Kansas City Symposium (reported in "New Approaches"). Of special interest was the challenge given by Alvin C. Eurich, vice president of the Fund for the Advancement of Education, who discussed assumptions he claimed "educators generally have accepted without question." They are as follows:

1. All teachers are alike.
2. The most effective learning situation is one teacher for every 25 to 30 pupils.
3. Teachers must do everything except janitorial work (whereas other professions have found that a "cluster" of people is usually more effective).
4. The most effective salary schedule is based on preparation and experience.
5. Good instruction can be carried on only by a teacher through word of mouth and in person.
6. Teachers should have maximum responsibility and pupils minimum responsibility for learning — teachers must *direct* learning.
7. All teachers, to be effective, must take certain prescribed courses in education (a veiled reference to the "Arkansas plan of teacher education").

Another good panel discussion was focused on the N.S.B.A. conference activities of 1955. M. C. Stapley, W. A. Shannon, and Clint Pace respectively reported on community education conferences, state "White House Conferences," and the national White House Conference, in all of which the association played a large part.

STATEMENTS OF POLICY ADOPTED

At its final business meeting, the association unanimously adopted four statements of policy to add to the present platform of 20 such statements. They expressed support for (a) a broad curriculum as contrasted with a curriculum of the three R's, (b) systematic instruction in the schools about American public education, (c) a program of N.S.B.A. research, and (d) long-range planning by local boards. No other resolutions were submitted. An attempt by the Michigan delegation to introduce, under suspension of the rules, a resolution in favor of federal aid for construction was defeated, 2 to 1.

The most spirited action occurred on the election of a president for 1956-57. Three candidates were nominated, and after two ballots Taylor Hicks of Arizona was declared elected.



President O. H. Roberts congratulates Edward Tuttle, executive secretary, on receiving the exhibitors' award.

Other top officers chosen are: first vice president, Mrs. H. M. Mulberry, Illinois (reelected); second vice president, Robert E. Willis, Florida, and treasurer, Everett N. Luce, Michigan (reelected).

William A. Shannon, formerly executive secretary of the Tennessee School Boards Association, and presently superintendent of schools at Morristown, Tenn., will succeed Edward Tuttle as executive secretary of the National School Boards Association, when Mr. Tuttle retires at the end of June.

Four directors were elected for three-year terms: Roy O. Frantz, Colorado; Jack A. Stewart, Ohio; Clyde McFarland, Iowa, and Mrs. Fred A. Radke, Washington.

Cyrus Higley, New York, was chosen as director for two years to complete Mr. Willis' unexpired term.

Next year's convention was set for February 14 to 16 at Atlantic City, just preceding the A.A.S.A. convention.

As the concluding event of the convention, a handsome and eminently fitting tribute was paid to Secretary Tuttle for his selfless and devoted administration during the last seven years. Largely through his efforts the N.S.B.A. has grown greatly in numbers, stature and vitality and has won national recognition as a leading educational body. Since Mr. Tuttle's first convention in 1950, attendance has grown from 120 to nearly 1700, the number of affiliated states has expanded by 50 per cent, and the budget by nearly 200 per cent. A $1000 check, a gold watch, an engrossed resolution of appreciation, and other marks of appreciation were tendered.

There was only one off-beat note in an otherwise well planned and highly profitable convention. At the Southeast area meeting Friday afternoon, after two hours of skirting around the subject which occupied everyone's mind, segregation, the formal session was adjourned, and "a closed, executive, off-the-record session" was convened. With a few laudable exceptions, the Southeast group appeared to be determined to preserve segregation by all possible means. The spirit shown at this session—held "privately so as not to embarrass the N.S.B.A."—makes me wonder if all board members remember that in taking their oath of office they swore to uphold and defend the Constitution of the United States.

wire from Washington

By EDGAR FULLER

Stymied by politics

► The Kelley school construction bill is gathering dust in the rules committee of the House of Representatives. There it will remain at least until some informal agreements can be reached among members of the House on the Powell "anti-segregation" amendment, which in one way or another would seek to deny funds for schools wherever someone or other decided that the Supreme Court decision was being violated.

There are sufficient supporters in both House and Senate to pass the bill. President Eisenhower is eager to sign a bill. There is no substantial disagreement between those who favor the Kelley bill and those who favor the Administration's proposal, and their differences could easily be eliminated during the legislative process of enactment. There are also enough votes in the House rules committee to bring the Kelley bill to the floor of the House as soon as the segregation question has been resolved.

The real troubles faced, however, are many. This is an election year. Speaker Rayburn and one group would pass the bill without the Powell amendment. This position is that of the ranking Republican member of the House committee on education and labor, S. K. McConnell Jr. of Pennsylvania, and President Eisenhower, H.E.W. Secretary Folsom, Adlai Stevenson, and moderates of both parties. But there are others in both parties who are playing election year politics with the schools.

Mr. Powell's position as the legislative spokesman for the National Association for the Advancement of Colored People is one that will kill the bill. It is a futile gesture on integration which will have no effect on integration but which will deny schools to children of all races. It will also breed extremism in opposition, and already the lot of the Negro people throughout the South is becoming more precarious.

Democratic Majority Leader McCormack and Republican Minority Leader Martin, both from Massachusetts, take the same stand as Mr. Powell. So do many representatives who can at once appease the majority of voters who want the bill to pass and ensure its eventual defeat. There are also opponents of the bill who oppose the amendment too but who might refuse to vote on the amendment so that it would be attached and kill the bill.

To complicate matters further, some of the genuine supporters of the Kelley bill have come up with a legal contention perfectly designed to embarrass the Administration in the November elections. Their notion is that the Powell amendment is not needed because the Court's decision is "self-executing." If true, this would apparently compel federal officials to withhold funds for research contracts, land-grant colleges, school lunches, vocational education, school construction and operation in defense areas, and wherever else they believe there is "violation of the Constitution."

The Administration has made it clear that it has no intention of withholding funds at administrative discretion, and its legal advisers have said there is no authority to do so.

One result of this has been to frighten almost all Southern support away from the Kelley bill. Appropriate as it may have been to raise all these points for the consideration of Congress and however politically effective it may have been to embarrass the Administration, the talk about substituting administrative action for legislative authority will have to be understood to be clearly illegal before the House leadership will advance the bill.

When legal doubts have been cleared away, it is almost certain that the Kelley bill will pass. Even if executive power to withhold funds existed, however, it is highly improbable that Mr. Eisenhower, Mr. Stevenson, or any other responsible political leader would try to enforce desegregation in schools by administrative orders. Such would violate the gradual approach defined by the Supreme Court, because it would penalize communities and states at administrative discretion entirely outside the local judicial enforcement with equitable flexibility according to local circumstances and social readiness.

The Powell amendment should be introduced and then defeated to indicate congressional intention to leave enforcement to the procedures prescribed by the Supreme Court. Then the Administration will have no congressional mandate to exercise administrative discretion, but will have exactly the opposite—a congressional expression that enforcement through administrative withholding of funds is not approved by the Congress. The 1954 decision of the Court would then be left to judicial enforcement as stated in the Court's implementation opinion of 1955. The Kelley bill, enacted into law, would then have the same relationship to the desegregation process as other federal grants for education, such as those for research projects, land-grant colleges, school lunches, construction and operation of schools in defense areas, vocational education, and rehabilitation.

Extremism breeds extremism and is fundamentally out of harmony with our system of government. Mr. Powell and the N.A.A.C.P. are in fact extremists, stirring up useless trouble and promoting extreme resistance in areas where segregated schools cannot be abolished at this time by force.

The position of President Eisenhower and Mr. Stevenson is the truly American position, which political office seekers would do well to observe, in the opinion of this observer.

More money

► The Eisenhower Administration, H.E.W. Secretary Folsom told the A.A.S.A. convention, is asking Congress almost to double the funds for operating the Office of Education—from $3 million this year to almost $6 million next year, for research and for the expansion and improvement of many other services.

(*Continued on Page* 128)

Toward an *Expressive* SCHOOL ARCHITECTURE

ARCHIBALD COLEMAN ROGERS
Rogers and Taliaferro, Architects, Baltimore

EACH morning across my desk flows the daily flood of material released with malice aforethought upon the defenseless American architect, particularly the school architect. New products that do the job twice as well at half the cost; clever gimmicks in planning that give more area with less square footage.

No doubt the same daily flood engulfs the overworked school administrator.

Much of this material is valuable and does contribute, as claimed, to the improved functioning of the schools we design. But something is missing. In all this spate of words affecting today's school architecture, there is a great silence on the one question that seems to me of transcendent importance: What is the message of our school architecture?

For architecture, since the time of the pharoahs—and even before that—has taught its lesson clearly, in its own language, a language that is sometimes more understandable than the printed word. The archeologist and historian read the architecture of the past and understand its lesson. Occasionally this is the story of an individual speaking across the ages; more often, it is the story of a whole culture or civilization.

• • •

WHAT, then, is the story told by *our* school architecture?

I do not pretend to know the answer, but I feel there is a fine story waiting to be told. This story is clearly set forth in the words of those who have shaped the educational philosophy that today undergirds our school system. It is also implicit in the life of each school in the day-to-day relationships of children, parents and teachers.

Except for a few outstanding examples, this story has not been translated into the language of architecture.

So, at the risk of appearing presumptuous, I am stating my opinion in the hope that it may stir some discussion among those who agree or disagree with what I here say.

Before we understand the message we must know the language. I submit that the language of architecture consists of four clearly understandable elements. Let us call them:

1. The functional element
2. The sculptural element
3. The textural element
4. The structural element

The functional element in school architecture is the architect's solution to the problem of workability as presented to him by the educator. This is expressed most often as organized areas in two dimensions—or the floor plan.

The sculptural element is the projection of the floor plan into the third dimension, the organization of masses and spaces enclosing or defining the areas of the plan.

The textural element is the fabric that defines in turn these sculptural masses and spaces (the floors and walls and ceilings or even the fences and

hedgerows), the physical texture of the project.

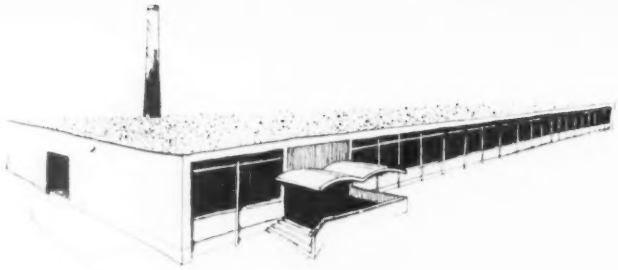
The structural element is the means of supporting this fabric — bearing walls, posts and beams, arches.

The message of our school architecture is told by the way in which we use these four elements — separately and together.

Each element must first be rooted firmly in the practicalities of the problem. In school architecture this means that each element must meet the twin tests of workability and economy. The plan must function well with no wasted space. The mass must be simple (for economy) and not exaggerated. The fabric and its supporting structure must be well suited to its location in the building and economical in first cost and ease of maintenance. This is, of course, the traditional basis for judging the success of a school design. If a design has failed this test, it has, in my opinion, then failed its primary assignment, for the architect has ignored the basic problem he was commissioned to solve.

But, if a design has *passed* the test of workability and economy, it does not follow that it has then succeeded. It is at this point that we should judge honestly the message of our design. What have we said in this architectural language about our times and our culture; about those whom we shelter, both teachers and children; about activities within this structure; about ourselves—architects and educators and parents—who have shared in the responsibility for the new school's design.

Too often we have consciously said nothing with our designs. We have labored hard to solve the practical problem and there rested content. Yet, though *we* said nothing, our designs speak their message nevertheless. In many cases this message is not, I think, one that would give a flattering —or a true—picture of ourselves and our culture to the historian of the future.



A — THE FACTORY TYPE

Do we mean to say that our schools are factory-like institutions?

If we open our eyes and look dispassionately at our newest school buildings, we might honestly confess that Example A has achieved a unique resemblance to that handsome new manufacturing plant on the other side of town. Perhaps it is the arrangement of windows or skylights, or just the obvious attention to simplicity and economy only. It may be hard to find the precise reasons, but do we honestly mean to say that our schools are conceived as factory-like institutions? I don't think so.

Or take Example B—a massive and dignified school design, a prewar concept, perhaps, stripped of its Colonial portico but with "modern" decor added (portholes, slanted masonry struts, contrasting panels of brick and stone veneer). Monumentality is the message of this design, and just a touch of competitive ostentation. Our community wishes to feel a slight superiority over our neighboring suburb, or I, as the architect, may feel that my designs should be massive memorials

B — FORMALITY

Do we wish to surround our children with a physical environment that opposes their pattern of living?



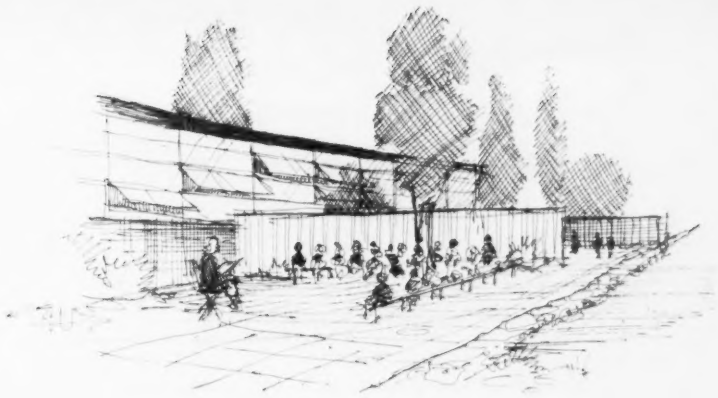
C — BY ADULTS FOR ADULTS

Should not all of our elementary school buildings have a touch of the child-like about them?



INTRIGUING VISTAS

Courts defined by planting can be designed into our schools.



aimed at the architectural critics of the future.

But is our way of life today based on formality? Isn't the present pattern of living (outdoor barbecues, do-it-yourself projects, the flight to the suburbs) quite the opposite? And is this expressive of our pattern of school living—of student councils and clubs and P.T.A. meetings? If our present living pattern expresses itself through informality, do we really wish to surround our children with a physical school environment that appears to oppose their pattern of living?

Or Example C (perhaps the most numerous) which simply says to the observer that the school was designed by adults for adults. Perhaps the scale is wrong or, more likely, the question of scaling the design to the small fry, who would use it, seemed relatively unimportant after we exhausted our ingenuity in solving the problems of economy and workability. But is the relationship of the design to the children really so unimportant? Should our schools be designed to be "child-proof" alone? Or should they not, perhaps, have a touch of the "child-like" about them?

These examples may seem overdrawn, and perhaps their message is not so clear that it would be read by each observer in the same way. Yet I am sure that we would not want ourselves and our times to be so judged.

If then we do not intend to say what we seem to be saying in so much of our school architecture, the probable fault is that we have not consciously tried to say anything. To correct this fault, we (architects, educators and parents) must first feel the *need* for conscious expression. We must then *learn* our architectural language in order to express ourselves clearly. Finally (and of great importance), we must *understand* that which we would express.

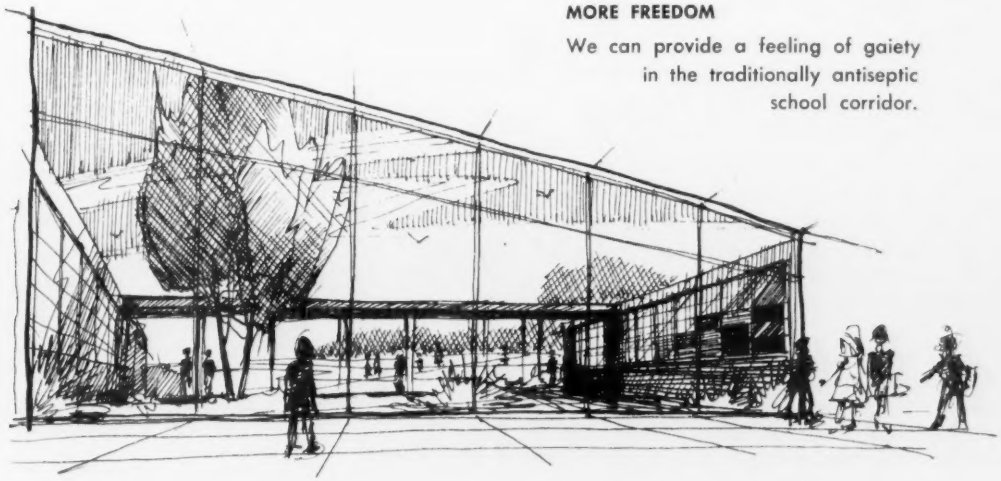
This means that we must be familiar with the basic philosophy behind our educational system and with its roots in our nation's history; we must dig far deeper than is normally required simply to learn the functioning of a school. Having understanding of the broad educational story, we should then relate this to the individual school. We should understand its individuality, the character of its community, the history of its locality, and the special needs of those who will live within the walls of that particular school building.

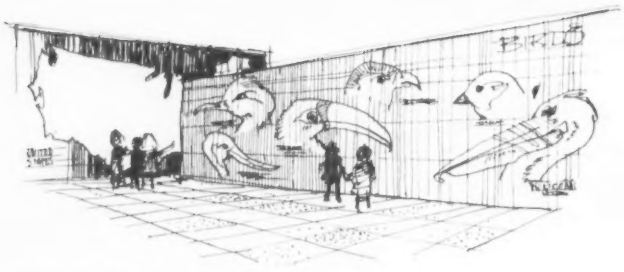
If we have fulfilled these conditions, we can create an expressive architecture for our schools and one that will convey a clear and honest message to be read by the future.

We would, I think, want first to say that our time and our culture are unique. We would want to express some idea of the dynamic quality of this period, of its mobility and informality. We would certainly wish to convey in our school architecture some expression of our national heritage, for in our system of public education we are dealing with perhaps

MORE FREEDOM

We can provide a feeling of gaiety in the traditionally antiseptic school corridor.





PLAY AREAS
Why not include decorative patterns to break up wall surfaces?

the most abiding and the most revealing of our American traditions.

Second, we would want to say that our schools have been designed to shelter and nurture *our own* children. A personal relationship should be expressed between ourselves—architects, educators and parents—who share in the design of the schools and the children who will "live" in them for so much of their childhood. An impersonal and unloving approach to school design will result in a cold and unloved building.

LIVING MEMORIAL

We would finally want to say about ourselves, as architects, educators and parents, that we have worked with honesty and with some humility to make a *living* memorial of each new school; not a memorial to ourselves but rather a thanksgiving for the rich inheritance of our past and present, a confident investment of our talents and resources in the future.

But can we really give concrete expression in school architecture to these rather abstract themes—to the theme of individual freedom? Or informality? Can a building express that it is an environment of learning for children?

If we are able to give such concrete expression to these themes, won't we then sacrifice the essentials of economy and workability in our school designs?

I submit that we can, in practical and specific ways, give expression to these themes in our school design and, further, that this effort at expressive design will not in the least jeopardize the workability and the economy of our schools.

In *plan* we can, without affecting cost or workability, treat our spaces with more freedom. Classrooms need not be rigidly compartmentalized, each like the other. With modern lighting we no longer need to bind our schools to compass-orientation for day lighting. We can instead orient classrooms to views or vistas—or tolerate a pool of sunlight here and there.

FEELING OF LIGHTNESS

In *mass,* again without affecting economy or workability, it is possible to achieve a feeling of lightness and shelter in the school. By the sensitive composition of the sculptural elements of the design, a large school can be made to seem less imposing and more nearly in scale to the child. Often the use of broad overhangs and deep fascias can be made to "pull down" overly tall shapes and lend a sense of repose to the school. Intriguing vistas—courts defined by planting—can be designed into modern American school buildings through the creative use of this element of the architectural language.

And in *texture and structure* we can, for example, give a feeling of gaiety and interest to the traditionally "antiseptic" school corridor by proper fenestration. Conversely, other areas can be treated with cool colors, natural woods, and planting to give a sense of repose. Play areas might be more interesting if adjacent surfaces were to include occasional decorative patterns to break up the wall surfaces. Will these examples add to the cost or detract from the workability? I don't think so.

But, above all, to give expression successfully to our school architecture, architects must use wholeheartedly not only their ingenuity but all their creative talents, and parents and educators must understand and aid in this creative effort—and, in fact, demand nothing less of the architect than a commitment of *all* his resources to the design of *each* school.

"MACHINES FOR LEARNING"

If we fail to approach our school architecture in this way, if we are unmoved by the challenge of telling so noble a story, if we concern ourselves only with "bread alone"—the workability and economy of our design—then I fear that a generation of Americans will grow to maturity with little of pleasure to remember in the "machines for learning" with which we have surrounded them.



If we *do* accept the challenge and approach our school design with a spirit of dedication, if we honestly strive together for an expressive school architecture, we may make a contribution to the future of our children and our nation far beyond our present realizations.

OPINION POLL

Most schoolmen favor giving federal aid for school construction to all states, with extra allotments for needy districts

A nationwide sampling of superintendents by The Nation's Schools

THIS is the house that jack built. It's a schoolhouse built with local jack. It's a pretty fair building, but it simply cannot encompass all the animate Jacks and Jills of the neighborhood. Some of them are already toddling to kindergarten and first grade on a swing shift.

The district needs several new schoolhouses to take care of new kids. The state needs thousands of new schoolhouses. But neither the district nor the state can raise enough jack to build all these houses. The only man they know with money—money unlimited—is Uncle. Suppose they write to Uncle.

Uncle has been written and written to, and at present he is considering some large donations. Congressman Kelley's bill would grant $400 million annually for four years. The Eisenhower Administration favors $250 million annually for five years. But how should he distribute his jack—our jack—most equitably?

Should he give grants to poor states only on the basis of demonstrated need? Should he hand out millions to all states on a flat-grant basis? Should he give a flat grant to all states, plus an extra allotment for demonstrated need?

Believing that, of all people, school administrators should be of greatest aid in helping Uncle decide these questions, The NATION'S SCHOOLS addressed these alternatives to a nationwide sampling of superintendents.

MAJORITY PREFERENCE

Two to one, the responding administrators came back with this advice: Give all states a flat grant with extra allotments for demonstrated need. This overwhelming preference is closely in line with the Kelley bill, now on the floor of the House.

In approaching schoolmen for this month's poll, the magazine did not take it for gospel that all those sent questionnaires were deep-dyed federal aiders. (Nor were all of them, it turned out.) They were merely asked an opinion on the relative merits of three distribution plans.

This capsule comment covers majority opinion: "All states should have some. The neediest, the most."

Another superintendent remarks cogently: "Many school districts in the so-called rich states are in a poor area and need help financially. State basis and district need would be much more logical."

Congressman Kelley will find among our respondents kindred souls such as this one: "I think federal aid should be distributed after the states have made effort to solve their own problems. It is the inequities within states that need attention. The three alternatives you list don't encourage states to work out their own solutions as much as they should."

A realist writes: "In my opinion, every section of the country will have to get some benefit in order for such a bill to receive enough votes in the Congress."

From the group believing that federal aid should go only to poor states on the basis of demonstrated need comes this point of view: "There is much shrinkage in the tax dollar between the time of collection and the time when it actually goes into the project, because of costs of collection, administration and the like. In many states, like New York, the amount received back on the basis of need as compared with other states would be much less than paid out from the state for the program. Therefore, why not tax only sufficiently to help take care of need throughout the country and save the 'shrinkage' on the money that would be coming back to the state?"

"My personal choice is for poor states only," writes a Georgian, "but I do not believe aid on this basis would be acceptable to the nation as a whole."

From Pennsylvania comes this response: "School construction is needed, but we also need a balanced budget. I cannot see the idea of giving federal aid to states not in need of outside aid."

FLAT-GRANT PROPONENTS

From among the smaller flat-grant contingent comes this remark of a superintendent from Wisconsin: "Within the boundaries of wealthy states there are certain areas that are economically depressed. Therefore, all states should receive a flat grant. However, only those areas that need assistance should receive it."

Some of those questioned couldn't resist talking a little to the right or to the left of the subject. Like this one: "If the federal government would quit levying such heavy income taxes, we could come nearer carrying our own program." Or: "How about federal aid (without federal control) for salaries?" Again: "Federal funds to supplement teacher salaries, and so earmarked that they can't be used for any other purpose."

Preferences for Federal Aid Distribution

If federal aid for schoolhouse construction is voted by Congress, should the money be distributed:*

1. **Only to poor states on a basis of demonstrated need?**
   Yes 22% No 78%
2. **To all states on a flat-grant basis?**
   Yes 10.4% No 89.6%
3. **To all states on a flat-grant basis, plus extra allotment for demonstrated need?**
   Yes 69.6% No 30.4%

*This does not assume that you favor federal aid. We seek your opinion as to the relative merit of these three distribution plans.

This is the last in a series of articles on

HOW TO READ BLUEPRINTS

C. P. ATKINS and J. P. GRAHAM
Atkins, Barrow & Associates
Architects and Engineers, Urbana, Ill.

TWO sections of a set of blueprints come under the jurisdiction of architectural engineers. They are: (1) the structural parts of a building, which include the structural framing and footings and foundations, and (2) the mechanical, which includes the plumbing, heating and ventilating, and electrical. Often, drawings of the structural framing which is above the ground and the footings and foundations which are below are considered separately in blueprints.

Footings are concrete "feet," placed in the ground and sometimes reinforced with steel bars, on which the foundations and the subsequent building load are placed. Here is where the information gained from the soil borings noted on the title page is utilized. Engineers determine by tests the load carrying capacity in pounds per square feet of the soil beneath the proposed building. This information, with the weight of the building, determines the size, design and number of the footings. Building weight is measured in terms of "dead" and "live" load. Dead load is the stationary weight of the building itself and the permanently fixed equipment. Live load is made up of movable equipment in the building and human beings who will use it.

Foundation walls serve as a base on which the building is built and carry the load of the building to the footings and earth below. These walls must be strong enough to resist the side pressure of the earth. Steel reinforcing bars are used in foundation walls which are deep into the ground to offset the extra heavy earth pressure. Another function of foundation walls is to keep moisture out of the underground parts of the building. Waterproofing is required in particularly wet areas.

Most school buildings are of masonry construction with poured concrete for both footings and foundation walls. Foundation walls are anchored into a slot in the footings called a "keyway" to prevent side movement. Masonry walls are laid directly onto such foundation walls while steel columns, which form a part of the structural framing of the building, are fastened to the foundation by means of a steel base plate and long steel anchor bolts.

QUESTIONS	ANSWERS
1. How thick are the exterior foundation walls? The pipe trench foundation walls? The interior foundation walls?	1. 1′4″. 8″. 8″.
2. What are the dimensions of the exterior wall footings? Pipe trench wall footings?	2. 1′ by 2′. 1′ 4″ by 8″.
3. What elevation heights are noted?	3. 99′8″. 99′4″.
4. How is column base plate fastened to foundation wall?	4. By means of a 15″ long steel anchor bolt.
5. Where are keyways found? Why?	5. Where the foundation walls meet the footings. To prevent sideway slippage.
6. Under what conditions is the floor slab more than 4″ thick?	6. Under nonbearing interior wall partitions where the floor slab is thickened as directed.
7. How thick is the pipe trench floor?	7. 2″.
8. How thick is the grouting used?	8. 1½″.
9. What foundation walls support columns?	9. North and south exterior foundation walls.
10. What is the specified compressive strength of the concrete?	10. 3000 pounds per square inch after 28 days.

FOOTINGS AND FOUNDATIONS

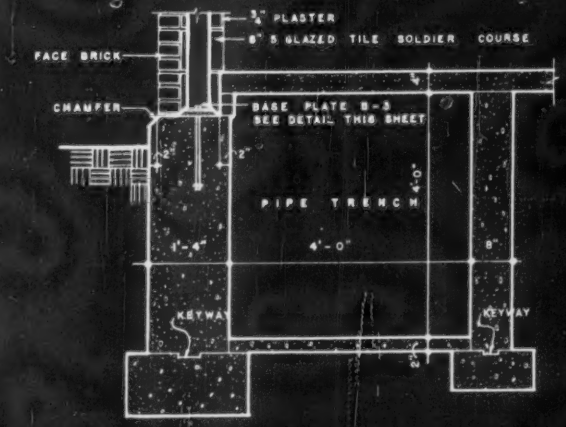
Shown on the opposite page is part of a footing and foundation plan with large-scale section drawings.

In the plan drawing the shaded portion represents the foundation walls. The unshaded areas extending on either side are the footings on which the foundation walls are built. Except where pipe trenches are noted, the concrete floor slab of the building is poured directly onto the earth. Note that footings and foundations are also placed under interior bearing walls. The indentation of footings and foundations at the west end of the building reflects an entrance.

The detail drawings show how a column and its base plate are attached to the foundation wall and how the pipe trench is constructed. The concrete notes give additional information for the contractor which can be found also in the written specifications.

STRUCTURAL FRAMING

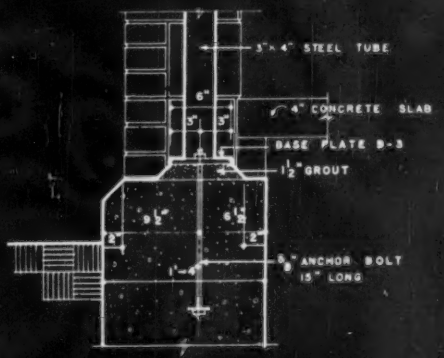
The putting together of the various structural parts of a building—walls, columns, beams, trusses and so forth —so that each performs its functions is called structural framing. Basic building construction falls into two general categories — wall-bearing construction



PIPE TRENCH DETAIL

SCALE 3/4" = 1'-0"

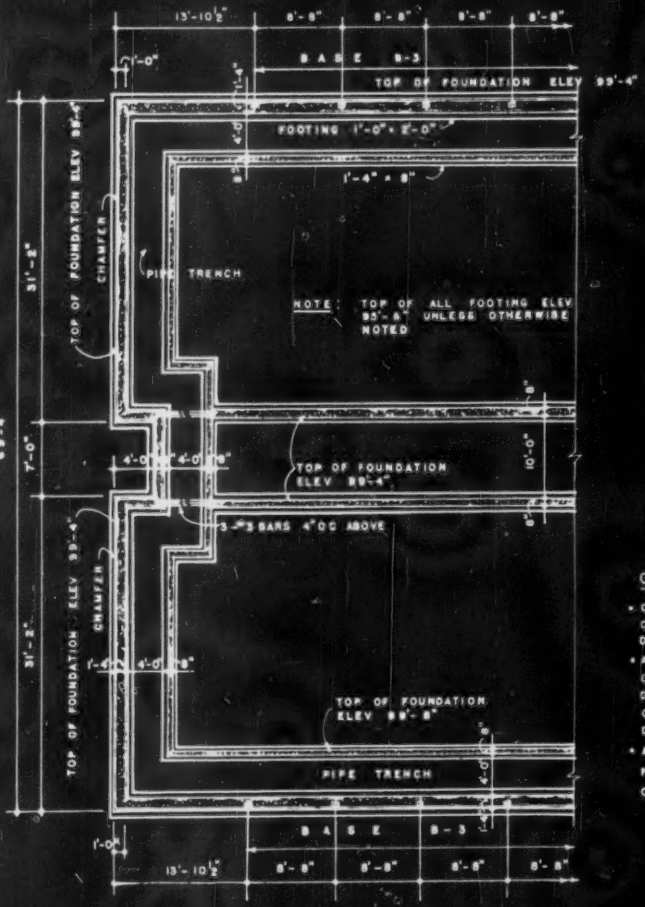
FEET 0 1 2



BASE PLATE DETAIL

SCALE 1 1/2" = 1'-0"

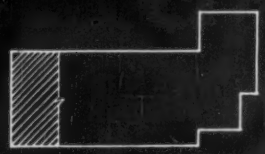
INCHES 3 6 9 12



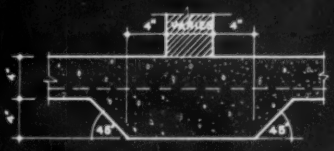
FOOTING & FOUNDATION PLAN

SCALE 3/8" = 1'-0"

FEET 1 2 3 4 5 10 15 20



KEY PLAN



THICKEN ALL SLABS AS SHOWN UNDER MASONRY PARTITIONS WHICH DO NOT HAVE FOUNDATION WALLS & FOOTINGS

CONCRETE NOTES

- CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 3000 POUNDS PER SQUARE INCH AFTER 28 DAYS
- ALL STEEL REINFORCING BARS SHALL HAVE 3" CONCRETE COVERAGE WHEN CONCRETE IS DEPOSITED AGAINST THE GROUND, AND 2" CONCRETE COVERAGE WHEN CONCRETE IS DEPOSITED AGAINST FORMS
- ALL FOUNDATION WALLS TO HAVE 2 #3 BARS PLACED LONGITUDINALLY 2" FROM BOTTOM OF FOUNDATION WALL

and skeleton construction. In most one-story school buildings where some of the walls help carry the building load to the footings, a combination of these two methods is used. In multi-story buildings where the loads, including the weight of the walls, are carried by the structural frame of columns, beams and trusses, skeleton construction is employed. Structural framing drawings can be complex and are determined by such things as strength of materials, wall and floor loads, and spans to be made. It is not necessary to examine these factors for our purposes although examples are given along with some terminology to help in the over-all understanding of how a building goes together and why.

The structural drawings in a set of blueprints indicate the size of major columns, beams and trusses and give critical dimensions. Detailed drawings for construction work are done by the supplier of the steel members to the contractor and are called "shop drawings."

Shown here is part of the steel roof framing plan for a one-story building as indicated by the key in the upper left-hand corner. At the right are two large-scale special detail drawings to illustrate two structural conditions. This building contains load bearing walls which support the steel structural members except along the string of windows on the north and south sides. Here, steel columns, which we showed in the floor plan and footing and foundation drawings, help support key beams.

First, let's translate some of the symbols and technical terminology used in steelwork found in these drawings, as closely as can be done by the linotype characters available:

1. 8 WF 17 & ¼" PL—8 inch deep, wide-flange beam weighing 17 pounds per running foot with a ¼ inch thick steel plate attached to the bottom of the beam to support facing masonry. See section drawing S-S.

2. 8 ⌊ 11.5 & ¼" PL—8 inch deep channel beam weighing 11.5 pounds per foot with an attached ¼ inch thick steel plate which runs the length of the channel. See section drawing T-T.

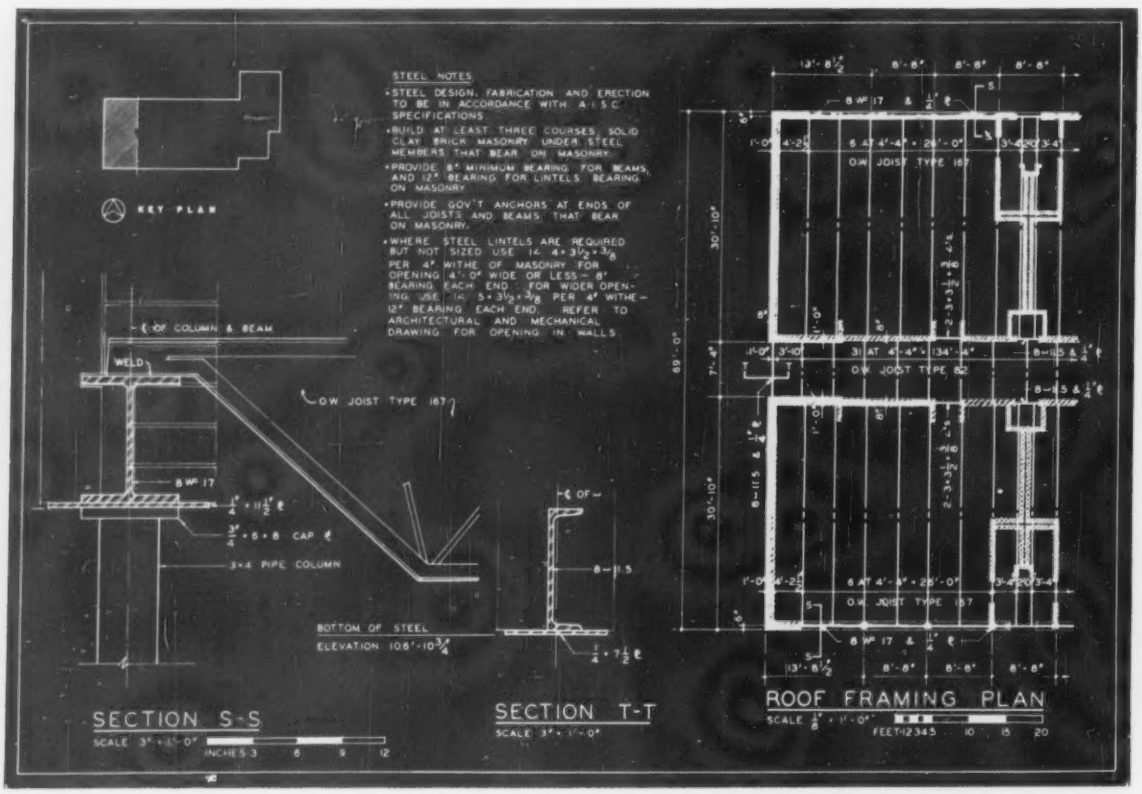
3. 2 – 3 x 3½ x ⅜ ∠'s—two steel angles which will be placed back to back. The first two figures are the lengths of the legs of the angles; the third is the thickness. See the reference to angle pieces in the notes in

QUESTIONS

1. What does "O. W. Joist Type 82" mean?
2. How many do you find of "O. W. Joist Type 167"? How are they supported?
3. Where are channel beams used?
4. What special construction is indicated for masonry walls which carry steel members?
5. Approximately how heavy is one of the "O. W. Joist Type 167"?

ANSWERS

1. An open web joist 8 inches deep weighing 2 pounds per running foot.
2. 20. By the 8*WF* 17 Beam.
3. Over west entry doorway and over two interior doors to support joists.
4. "Build at least three courses, solid clay brick masonry under steel members that bear on masonry."
5. Approximately 210 pounds. This is based on an approximate joist length of 30 feet at 7 pounds per foot.



the upper right-hand corner of this page (of blueprints).

4. O. W. Joist Type 167—open web joist 16 inches deep weighing 7 pounds per running foot. This member is actually a type of lightweight truss used here as a joist.

In the steel notes:

1. A.I.S.C.—American Institute of Steel Construction.

2. Government anchors—types of anchors to tie steel beams or joists into masonry walls. Has no allusion to governmental regulations.

Steel members are fastened together by one of three methods: high strength steel bolts, rivets or welding.

MECHANICAL

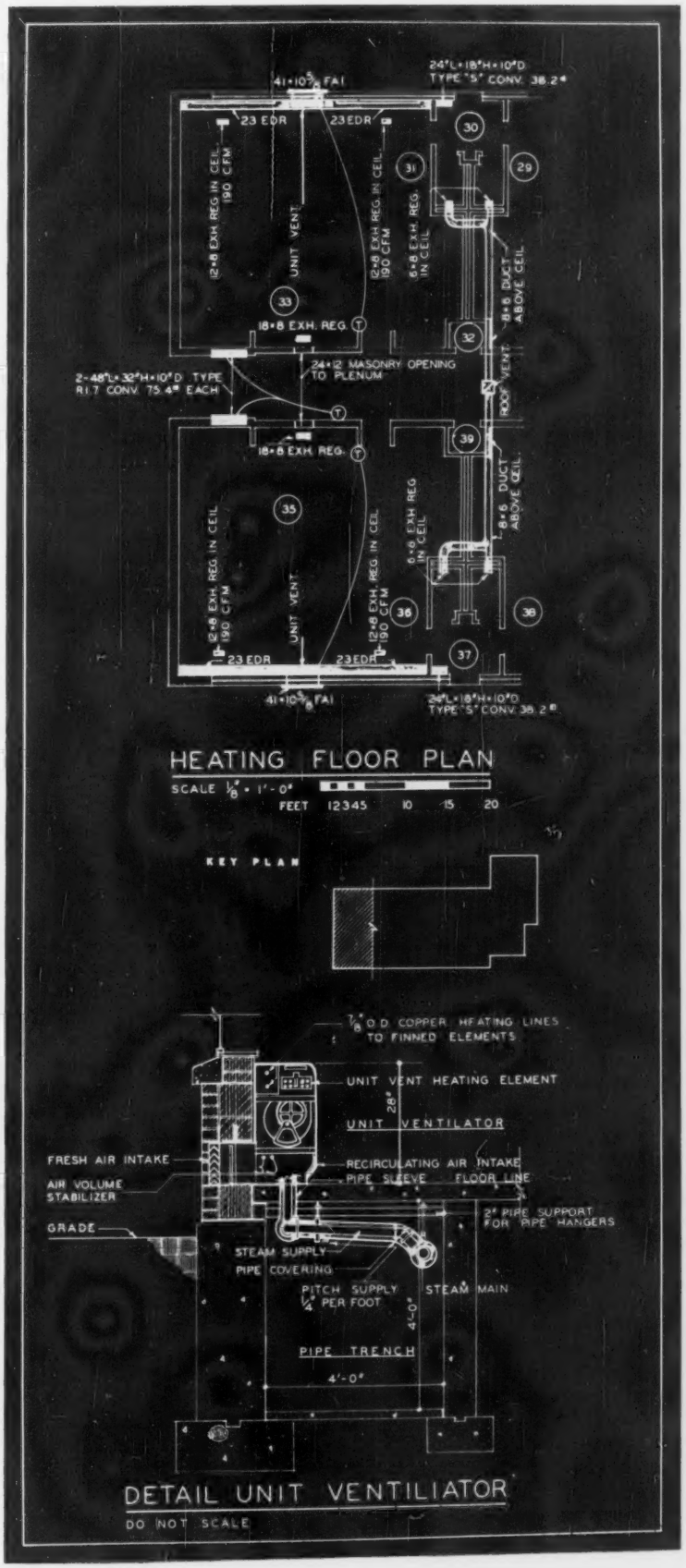
The last part of a set of blueprints which we will examine are drawings of the mechanical features of the building—the plumbing, heating and ventilating, and electric—done usually by engineers in these fields for the architects. This is a closely coordinated effort to ensure the smooth integrating of the proper facilities into the building design. Mechanical drawings are highly diagrammatical, and are used to locate pipes, fixtures, ducts, outlets and so forth. Detailed descriptions of this and other equipment to be installed and the work to be done are found in the written specifications.

This drawing shows part of the heating and ventilating plan of a building and a section view of a unit ventilator for an industrial classroom. As you can see, the information in this and other drawings of mechanical facilities is highly technical and refers to types of equipment to be installed.

Briefly, the heating system is steam with finned convectors and unit ventilators employed as dispensing agents of the heat. The key to a few abbreviations and symbols will enable you to understand the general meaning of these drawings.

T.....	Indicates a thermostal control location
FAI.....	Fresh air intake
CONV...	Convector for heat dispensing
EDR.....	Equivalent in square feet of direct radiation
CFM.....	Cubic feet per minute
Exh. Reg..	Exhaust register

When you have had an opportunity to study the drawings, discussions, questions and answers in this series, an excellent "final exam" of what you



have learned will be the analysis of a set of blueprints of one of your own school buildings. The newer the building is the better, as building materials and technics change. A fairly contemporary set of blueprints will be more valuable in helping you understand any new buildings you now have under way or are planning for the future.

If you are fortunate enough to have a building project under way and a building being constructed, or about to be built, this is an outstanding opportunity for you to put your blueprint reading lessons to work "on the job."

"ARMCHAIR TOUR"

Let's take an "armchair tour" through your building with the blueprints as our guide. First, turn to the floor plans of the building, which will be near the front of the set, and imagine you are walking up to the main entrance.

No two schools will be the same, but, generally, here is what you can expect to find. You probably will approach the building on a concrete walk, from 6 to 8 feet wide. The building walls in most cases will be of brick, with large expanses of steel or aluminum window sash, although you may have a building of wood, steel panels, or stone. In many instances the entrance will be of aluminum frames, with multiple doors and sidelights, while overhead there may be an overhang or protective canopy in which light fixtures are recessed. As you approach the entrance, you will see the name of the school on an adjacent wall, above or on the canopy. There also may be a planting box, a seat, or both, near the entrance. As this is usually a "dressed up" area, there may be a panel of decorative stone, marble, granite or ceramic tile near the entrance. Now walk up the steps, no more than two or three, we hope, and cross the concrete entrance platform to one of the doors which you grasp by a "pull."

Looking to your right and left, you find either solid walls or windows, depending on the general design and the layout of the interior elements of the building. Pull open the door, which swings to your right, and step inside, probably onto an entrance mat recessed into the floor. Here you may be in a vestibule where another series of doors opens into the lobby. If so, you may discover that the exterior wall material has been brought into the vestibule with you, although there may be a change in the flooring material from concrete to terrazzo or quarry tile. The ceiling may be finished in plaster or acoustical tile and may contain more light fixtures.

All of these things, or others which are included in your building, will be described and illustrated on your blueprints. Upon inspection you will find a whole maze of lines, dimensions, symbols and notes on your blueprints referring to the entrance and its components. There will be allusions to door and window schedules, to hardware specifications, to large-scale drawings on other sheets, and so forth. Before you go farther, look up every reference you find and make certain you understand all the associated drawings to which you are referred. When the picture is clear and you can visualize what takes place in the over-all construction, go on into the building proper. Here you proceed as you did at the entrance, studying all the drawings in the set which have reference to the area you are examining.

UNDERSTAND CONDITIONS

Without a doubt, there will be things you won't understand on your set of blueprints. This certainly is no indication that your prints are faulty or incomplete. It is no more possible for you to have developed an absolute knowledge of architectural drawings from the brief information reviewed in these articles than it is possible for a layman to read a textbook on school administration and thereby be qualified in the profession. However, if you study your set of blueprints carefully, with our examples and discussions clearly in mind, you should be able to understand most conditions depicted. Don't forget, practice will do wonders. You may find differences from our examples in some of the symbols and drawing technics used by your architects, but, if you have been able to grasp the fundamental purpose of the various drawings, these differences won't bother you too much.

Proceed methodically through the entire building, via your blueprints, being sure to check all pertinent elevation, wall section, structural framing, and footing and foundation drawings as you go. The large-scale detail drawings should prove especially interesting to you as they describe in detail how the different elements of construction are assembled. The structural and mechanical sections of the blueprints may give you some trouble with their involved and complicated engineering conditions, but do the best you can. The "journey" should prove enlightening and educational.

Much vital information, especially that which has to do with methods of construction, quality of materials and equipment, and the manner of conducting the work, is found in the written specifications which are used hand in hand with blueprints by contractors when bidding on a job or performing their work. By all means study through a copy of the specifications for your building if you have one available. It will help you to understand further the message of your blueprints and will increase your knowledge of the language of the building professions.

After you have taken your trip through your "mind's eye," *actually* walk through the building with the blueprints in your hand. You will discover how active your imaginative powers were and whether or not you had been able to capture the feeling of the finished product and visualize how the building was put together and why. We shall not concern ourselves at this time with the merits of one architectural design over another or attempt to decide what sort of school is the best educationally, esthetically or economically. That can come in a future discussion. All we're after now is *how a building goes together* as told us by the blueprints.

BETTER BUILDINGS

Such a study of technical particulars may seem unnecessary since administrators are mostly interested in such things as relationships of various elements of a building, space allotments, circulation patterns, and general function. However, working knowledge of the fundamentals of architectural drawings as shown in blueprints should increase your understanding of the whole picture.

It is our sincere belief that a little time spent in serious study of our three articles, and the review of an actual set of blueprints as outlined here, will make the job of school administrators involved in school planning and building programs easier, more enjoyable, and far more rewarding in terms of personal satisfaction and achievement in the quest for better buildings for better education.

Getting the facts for that long-time program is a community job, with laymen, school people, and the expert participating

A SURVEY OF SURVEYS

M. R. SUMPTION
Head, Office of Field Services
College of Education, University of Illinois

THERE is considerable evidence the general concept of the school survey has undergone a significant change. Whereas the survey of several decades ago placed chief, if not sole, emphasis on evaluation, present-day practice seems to favor the development of a coordinated long-range plan as the major purpose of the survey. In short, the trend appears to be toward the forward look with incidental glances backward to establish the basis for future plans.

The school survey as we know it is of relatively recent origin. The modern survey movement had its beginning early in the century and gained considerable impetus in the last four decades. Originally, its objective was almost exclusively that of evaluation. The survey was largely, if not solely, the responsibility of the outside expert.

To determine how much the concept of the school survey has changed, and what the nature and extent of local participation might be in survey projects sponsored by educational institutions in the country, an inquiry was sent early in 1955 to 100 colleges and universities. Teachers colleges devoted exclusively to the training of teachers were not included in the list. The 100 institutions with the largest number of students enrolled in their colleges or departments of education were sent inquiries. These included representative schools from every state in the union. The response to the questionnaire was 100 per cent.

Eighty-seven of the 100 institutions to which inquiries were sent reported survey activities being carried on. Of these 87 institutions, 62 are state controlled; 21 are privately controlled; three are municipal institutions, and in one, Rutgers, control is shared by the state and private interests. The list of institutions offering survey services includes all the large state universities as well as a number of smaller state schools.

Thirteen institutions reported that they did not offer survey services; however, four of these indicated that they have staff members who do individual consultation or are members of state survey staffs.

Those responsible for the direction of survey services in the selected educational institutions were asked to indicate which of the following descriptive terms best described the purpose of their survey projects. (Space was included for the respondents who wished to report a purpose different from any listed.)

1. Solely evaluative in nature.
2. Largely evaluative but containing a number of specific recommendations for changes.
3. Largely evaluative but developing an outline for long-range program of improvement.
4. Characterized by prerequisite evaluation incidental to the development of a long-range, integrated program for improvement which is the major purpose of the study.

Fifty-two institutions reported that they conducted only one type of survey. In all cases one of the four descriptions fitted the single type of school survey conducted by these schools. Thirty-four replies marked two or more of the categories, indicating that more than one type of survey was conducted. One of the 87 failed to report on this aspect of the survey.

Of the 52 single responses to the question, four indicated that the survey is "largely evaluative but contains a number of specific recommendations for changes." Eighteen conceive of the survey as "largely evaluative but developing an outline for a long-range program of improvement." A majority, 30, regard the school survey essentially as a project designed to develop a "long-range integrated program of improvement." Evaluation in the last case was prerequisite but incidental.

Twenty-five of the 34 institutions conducting more than one of the types of surveys listed conducted two types; eight conducted three types, and one

conducted four types. The combination of purposes 3 and 4 was mentioned with greatest frequency (13 times) among schools reporting more than one type of survey.

COLLECTION OF DATA

The school survey requires the collection of a relatively large amount of data concerning educational needs, finances, curriculum, physical plant, and other aspects of the school community. Who collects this data? This list of possibilities was suggested:

A. The college or university staff.
B. Local school administrators.
C. Local teachers.
D. Local lay people.
E. Other (state departments, architects and so forth).

Of the total of 87 institutions represented in the replies, only seven reported that the college or university staff collected *all* data. Two said that data collection was solely the responsibility of the local administrative staff. The vast majority of institutions reporting conduct some surveys in which the responsibility of data gathering is assumed *by more than one group.* Eighty-one reported the use of two or more groups to collect information.

The following frequencies were found in the 81 combinations:

A. College or university staff involved by 73 institutions.
B. Local school administrators involved by 80 institutions.
C. Local teachers involved by 64 institutions.
D. Local lay people involved by 65 institutions.
E. Other (state departments, architects and so forth) involved by seven institutions.

This means that 73 of the 87 institutions reporting used their own staff *in conjunction with* other persons or groups in the collection of survey data. Eighty utilized the local administration as part of the data collecting team.

The combination appearing with the greatest frequency (45 times) was ABCD, or all of the specified categories. In addition, five institutions reported that the ABCD categories plus architects and state department representatives were employed in the collection of survey data. Thus, 50 institutions make use of four listed types of personnel (ABCD) for data collection in at least some of their surveys.

Perhaps the most surprising figure is that representing the number of institutions which involve lay citizens in the collection of survey information. The 65 institutions in this category represent roughly three-fourths of the total number reporting survey services. *This certainly represents a major departure from the practice of even a decade ago.*

ANALYSIS OF DATA

Once the necessary survey data are collected, they must be classified, interpreted and evaluated. This analysis of the data is solely the function of the university or college staff in 18 institutions; it is a task of a combination of the personnel groups in all surveys conducted in 63 institutions.

The following listing shows the use of the various personnel groups in the analysis of data:

A. College or university staff involved by 83 institutions.
B. Local school administrators involved by 65 institutions.
C. Local teachers involved by 47 institutions.
D. Local lay people involved by 45 institutions.
E. Other (state departments, architects and so forth) involved by 10 institutions.

Thirty-seven of the 69 institutions which reported the use of combinations of personnel groups in the analysis of data indicated the participation of all the listed groups, ABCD, in this function. In two institutions the four groups were supplemented by state department of education personnel, making 39 institutions which included all four listed groups in their data analysis. Perhaps the most interesting item in connection with data analysis is the number of institutions which involve lay people in this activity. Forty-five, or more than half, of the 87 reporting institutions did so. This number is only slightly less than the 47 reporting the use of local teachers.

However, it should be noted that considerably fewer institutions use lay people and local teachers in data analysis than in data collection.

Perhaps the key question is the final one: "Who has the responsibility for deciding what the final conclusions and recommendations shall be?"

Thirty-two institutions reported that a single group, the college or university staff, was solely responsible for the conclusions and recommendations in all their surveys. Forty-eight indicated that no single group was responsible for conclusions and recommendations in any of their surveys but that various combinations of the listed personnel groups assumed this responsibility.

The involvement of the various personnel groups in formulating conclusions and recommendations is:

A. College and university staff involved by 85 institutions.
B. Local school administrators involved by 55 institutions.
C. Local teachers involved by 33 institutions.
D. Local lay people involved by 40 institutions.

Two institutions in all their surveys place the responsibility for recommendations and conclusions on the local administrators. Two other institutions report that conclusions and recommendations in *some* of their surveys are made by lay citizen groups.

It is in the formulation of conclusions and recommendations that lay citizen participation reaches a numerical low. However, it is interesting to note that in the numerical sense lay participation in decision making is significantly greater than teacher participation.

It is clear that both the concept and the method of the school survey are undergoing significant change, and, from the present trend, it might be predicted that the survey of the future will be a school-community planning project in which the "expert" staff will serve largely, if not entirely, in an advisory capacity.

THE COLLECTION of information basic to evaluation and planning has become in many instances a total school-community effort involving both lay and professional people. The erstwhile common practice of "expert" collection of all data is now the *exception* rather than the rule. The analysis of data has to a lesser degree also become a cooperative task in which the lay people and the professional staff of the community join hands with the university or college survey staff.



Who plans the home economics department?

Who really does the planning—the school superintendent, the architect, a committee, the school board, the teacher? Actually, it goes far deeper than that—right down to the needs of modern homemaking technique, brought about by the demands of modern living.

The homemaker of today and tomorrow insists upon streamlining her activities in the kitchen. Hence the home economics departments of schools must be streamlined. Electric appliances are one essential in modern meal planning, and the basic appliance—the heart of this activity—is the *Electric* Range. That is why, if your students are to learn modern cooking, they need instruction in *Electric* Range cooking—and you can't give them what they need unless you have *Electric* Ranges!



Latest models important, too! If your school already *has* Electric Ranges, are they up-to-date? Today's models include many improvements and new features, and to teach modern cooking, your school's equipment must be modern. Your electric light and power company or appliance dealer can tell you how easy it is to install the latest, automatic *Electric* Ranges.

New edition of FLOOR PLAN BOOKLET

Every school management official is interested in what other schools are doing—and this booklet *shows* you. It includes floor plans, and can be of help either in checking or remodeling your present home economics department, or planning a new one. *The coupon below will bring your copy—FREE!*

ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • AMERICAN KITCHENS • CROSLEY • FRIGIDAIRE GENERAL ELECTRIC • GLOBE • HOTPOINT • KELVINATOR MAGIC CHEF • MONARCH • NORGE • PHILCO • RCA ESTATE STIGLITZ INFRA-AIRE • TAPPAN • WESTINGHOUSE

ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, Dept. NS-3-56
New York 17, N. Y.

Please send me, absolutely FREE, copy of "PLANNING THE HOME ECONOMICS DEPARTMENT."

We have (total number) ..... students in our home economics classes.

Your name ..... Title .....

Name of school .....

Street & No. .....

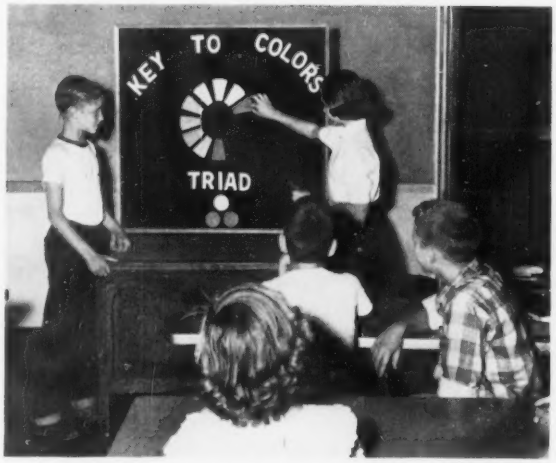
City, Zone & State .....

AUDIO-VISUAL

INSTRUCTION AND FACILITIES

Conducted by Walter A. Wittich

How new junior high school set up visual aids program with limited equipment



Students develop a color wheel on flannelboard.

Everyday Classroom Use of Teaching Aids

C. J. McCARTNEY

Assistant Principal, Normandy Junior High School, Normandy (St. Louis 21), Mo.

ONE day not long ago one of our mathematics teachers was trying to explain "fractions" to a class of retarded pupils. She spent weeks trying to get the idea across, but she made little progress. Finally, in an attempt at a change of pace, she showed a film on the subject.

At one point in the film a pie was cut into various fractional parts. Suddenly, a boy jumped up and said, "A fraction is a part of a whole." From that moment on the term "fraction" took on a concrete meaning for the entire group. They were able to proceed with the study of fractions.

This is just one example of the way we use films every day. Our teachers have found that audio-visual aids—films, filmstrips, flannelboards, tape recorders and globes—are extremely valuable classroom tools.

We draw most of our audio-visual material from the St. Louis County Audio-Visual Education Service, a cooperative set up by the county superintendent's council. The service has more than 3000 sound films and 1100 titles plus numerous recordings, tapes and filmstrips. The inventory is valued at more than $300,000.

All requisitions for films are handled through my office. Each May the heads of the various departments are given a requisition blank for ordering films for the next school year. Department heads consult with their teachers and set up their programs. Ordering a particular film a year in advance is not as difficult as it might sound, since all teachers follow a course of study that lists subjects to be covered week by week.

We take the department heads' requisitions and set up a day-by-day schedule of audio-visual needs for the coming school year. We immediately order the aids we'll need for the first

A boy tape-records a talk he makes to his speech class.



Teacher and students criticize when speech is played back.



AN EXCITING NEW ACHIEVEMENT IN OPAQUE PROJECTION

Beseler Announces

VU-LYTE II

Doubling the illumination • Doubling its uses in Education

• The **VU-LYTE** II delivers twice the illumination (140 lumens!) of prior VU-LYTE models. The **VU-LYTE** II establishes a new standard of opaque projector performance, because it can be used in rooms that are partially lighted. A specially designed optical system and a new F/3.6 lens permits this new plateau of progress.

• The **VU-LYTE** II is smaller, lighter, more compact, easier to move.

• New Feed-O-Matic automatically locks in position, taking many sizes of material.

• The **VU-LYTE** II accepts large 3-dimensional objects for projection.

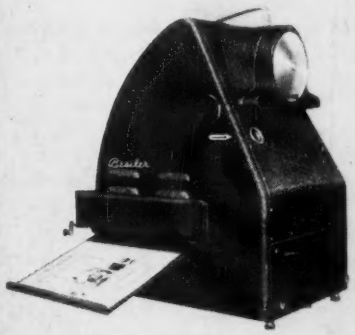
• The **VU-LYTE** II has provisions to keep books and glossy photos flat and in focus.

• Both the power cord and the lens cap are permanently attached. They can't be misplaced.

• The copy cooling mechanism in the **VU-LYTE** II is quiet.

• The elevation legs are spring loaded.

• Three point mirror suspension and dual rack and pinion gives the **VU-LYTE** II the clearest, easiest, sharpest, fastest focussing... PLUS MANY OTHER EXCLUSIVE FEATURES THAT MAKE YOUR CLASSES MORE LIVELY.



The **VU-LYTE** II is a magnificent new instrument for Teaching. See what it can actually DO to improve your classes. Send the coupon for a Free Demonstration. No cost. No obligation. Mail coupon today.

CHARLES
Beseler
COMPANY
SINCE 1869
EAST ORANGE, NEW JERSEY

The World's Largest Manufacturer of Opaque and Overhead Projection Apparatus.

This announcement by the Charles Beseler Company culminates years of research and development in projector requirements for the active growing field of Education. Beseler's reputation is based on always being FIRST with the new improved features that Educators want. For example:

BESELER — *FIRST* with large size copy apertures (8½" x 11", then 10" x 10").

BESELER — *FIRST* with Vacuumatic copy hold down.

BESELER — *FIRST* with built in pointers (Pointex).

BESELER — *FIRST* with automatic feed platens (Feed-o-Matic).

Beseler's Franchised Dealers are anxious to demonstrate the great new **VU-LYTE** II at your convenience. Write to Beseler. No cost or obligation, naturally.

Charles Beseler Company K-3
East Orange, New Jersey

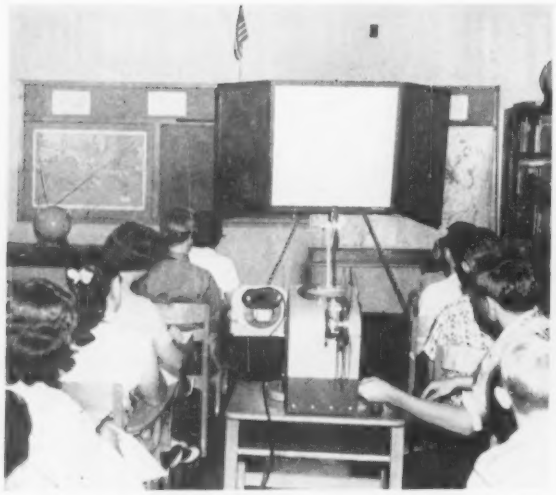
Please send information on the **VU-LYTE** II and arrange for a Free Demonstration at my convenience.

YOUR NAME _____

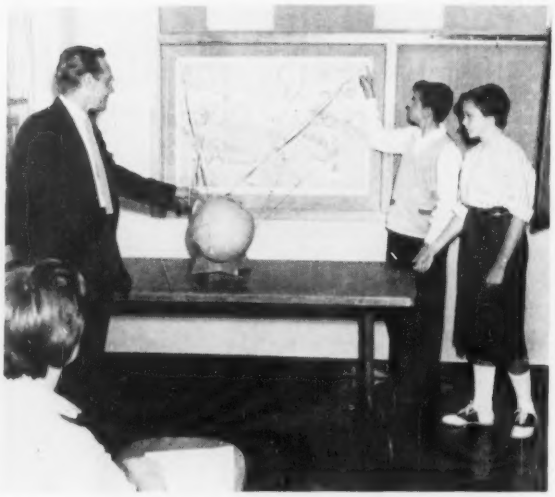
SCHOOL _____

ADDRESS _____

CITY _____



A social studies class is to see a film on map projection.



Students and teacher discuss the film after it is shown.

eight weeks of school. Then when school starts we send in an order each week for the aids we will need eight weeks later. Last year we requisitioned 323 titles and received every single one.

MANY TYPES OF AIDS USED

As often as possible we try to show a film in the classroom instead of having classes troop through the halls to a central showing. But we have only three projectors. Sometimes it is necessary to show a film to as many as four classes at once. We prefer to put a single film and projector at a teacher's disposal for an entire day. Besides motion pictures, we also use such other visual aids as tape recorders, flannelboards and filmstrips.

One teacher found a tape recorder extremely useful in a beginning speech class. Teaching pupils to use correct grammar and to learn proper pronunciation and control of nasal tones is sometimes a dull and difficult task. However, after two weeks of taping lessons and conversations with students she noticed a remarkable change. The children were enthusiastic, and motivation was no longer a problem. And, best of all, they were beginning to speak in the prescribed manner. With the tape recorder, they had accomplished the same degree of proficiency that previously required months of dull and rigorous drill.

One of our art teachers has found flannelboard especially useful in the study of color. She had her students make the 12 circles for the color wheel by painting the primary, secondary and intermediate colors with both tempera and water color. The class then selected the best colors, cut them out, and glued the flannel backing on them. Then the pupils developed a competitive game to arrange the colors in their correct position on the color chart. Thus the study of color became a fascinating enterprise instead of a tiresome task.

One of our home economics teachers tried an experiment that proved to her the value of audio-visual presentation. In a study on measurements of food, one class was assigned certain pages in the textbook to read to themselves. A discussion period followed; the teacher explained how to measure. A second class read the same assignment, but the reading was supplemented by a teacher demonstration on how to measure. A third class was shown a film on cooking measurements. To emphasize further the points brought out by the film, the proper measuring equipment was shown to the class.

LEARNED BETTER FROM FILM

When the students were tested, the class that had seen the film made superior scores over the other two classes. When those who had seen the film went to the laboratory they were able to use the measuring equipment correctly, just as they had seen it used in the film.

Perhaps one of the most difficult things to make comprehensible to the junior high school student is the differences and values of the various map projections. The methods of putting the round earth on a flat map paper are almost impossible to describe in words. This subject requires the changing technic of the moving pictures. With movies, they can see how the round surface undergoes changes in being flattened out on paper. The same effect cannot easily be achieved with words or still projectors.

FILMS BRING HISTORY TO LIFE

We sometimes find it very difficult to get students to realize that history is made by actual living people. But again films help us do the job. They are able to bring historical figures to life as no other teaching method can.

Films also save time in social studies. Often an American history textbook gives only a few lines, for example, to a man like Booker T. Washington. If the class sends to the library for additional books on this man, several minutes of searching and then several hours of reading are required. A 20 minute film can teach more about this man's life and work than several hours spent with a book.

Films also help us combat misconceptions and false historical impressions. We all know the popular image commercial movies and television have given our children about the romantic life of the cowboys on the plains. A good educational film, however, gives a much truer picture. Instead of showing the early western settlers riding, roping and shooting, it shows them building sod houses and creates for the student a much truer impression of this "romantic" time.

Often films give additional information not usually found in many textbooks. For example, almost every

EVERYTHING YOU WANT IN A CHALKBOARD Can Now Be Yours in BECKLEY-CARDY

New—Revolutionary



You have never seen a chalkboard like SlatoSteel! Try to mark its flint-hard surface with a coin—the coin flakes off but the SlatoSteel surface is unharmed. In every test, SlatoSteel comes out best.

Permanence	With the strength of steel and toughness of porcelain it outlives even the building. The fired green finish can never fade or wear out.
Legibility	The vitreous enamel writing surface cuts regular chalk crayon into clean, sharp lines that stand out strong and clear.
Writeability	Automatic electrostatic spraying assures SlatoSteel a uniform matte surface with just the right "bite" for chalk.
Appearance	A perfectly even Litegreen color that adds a distinctive, modern appearance to any classroom.
"Plus" Service	Magnetic letters, figures and symbols provide "touch and feel" learning and magnetic clips allow use as a posting surface.
Ease of Cleaning	The non-porous surface erases clean with felt erasers and can be renewed by washing as often as necessary, like any vitreous enamel appliance in your home.
Simple Installation	Weighs only 2½ lbs. per sq. ft. so sheets can be readily handled, cut to size, and installed by regular workmen without expensive special wall construction.
No Upkeep	The lifetime Porcenell finished sheet steel is permanent and never needs renewing or refinishing.

Build for the future with SlatoSteel—it will fit your budget.

Beckley-Cardy

BECKLEY-CARDY COMPANY • Manufacturers
1900 N. NARRAGANSETT • CHICAGO 39, ILL.

student remembers that Eli Whitney invented the cotton gin. After seeing a film on his life they come to recognize that his contribution of standardized parts, which is the very basis of our modern system of mass production, was an even greater contribution.

A social studies teacher says that audio-visual aids can and do help in developing reading skills. The student who reads words about rivers and mountains, about factories and machinery, and processes and places is just reading words unless he knows what the things are which the words represent. Audio-visual aids illustrate and describe these things represented by the words in more dimensions so that the words take on meaning.

We use current affairs filmstrips to stimulate the reading of newspapers and news magazines. These filmstrips build interest in world affairs which the student can continue to follow in the daily papers. They build a background of understanding so these events can be followed with more ease.

About five years ago we decided that there was a need for a course at the ninth grade level which would delve into and try to help young people solve the problems that seemed to confront many youngsters at every turn. A committee of six teachers, with me as chairman, proceeded to develop a course of study. We consulted both professional and lay people and finally came up with 10 units, including "Why Go to School," "Understanding Myself," "How to Get Along With Others," "How to Live With Parents" and "Boy Meets Girl." We could find no suitable textbook but did obtain short pamphlets. This course was placed in our curriculum without the sacrifice of one minute of instruction in the basic skill subjects.

The committee decided that, to make the course successful, it would be best if we could develop a feeling among the students that the answers to their problems came directly from them, not from the teacher. So we turned to the use of many educational films, especially the discussion type, which would pose questions, give information, and dramatize situations, but not answer the questions that had been raised.

We have found that the discussion type of film leads to a great deal of outside reading and causes students to seek out and bring to class information related to the subject from newspapers, magazines and books.

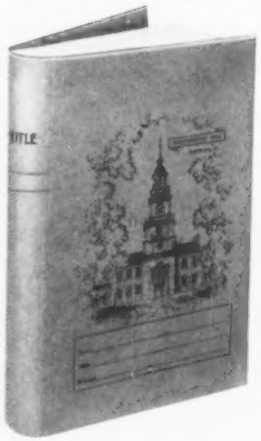
SITUATIONS DRAMATIZED

If you have ever tried to explain to ninth grade students and develop in them an understanding of such words as integrity, moral maturity, emotional maturity, personality, conscience, rationalization, projection and vandalism, you have found yourself faced with a difficult task. Educational films which dramatize these situations allow the student to share a common experience and generate enthusiasm. We think that these educational films allow the student to take the place of the person in the film. They see not only their own side but the other side. They begin to see that no action affects just them but also affects other people. We feel that we are giving our students a better understanding of intangibles by the use of these educational films.

All in all, we feel we are doing as good a job as possible with the limited amount of equipment we have. If we had more equipment we would enlarge our program. We are correcting the situation as rapidly as possible.

Over The Years

HOLDEN BOOK COVERS



have been recognized as the leader in their field.

They are keyed to meet the demands of budget conscious school administrators.

They are made of paper designed to withstand the wear incidental to classroom use —and they are water resistant, ensuring maximum protection for books carried to and from school.

HOLDEN BOOK COVERS . . .

Keep books clean and sanitary.

They prolong the life of the book.

They are attractive as well as practical.

They are easily adjusted and they stay on the books until deliberately removed.

When you think of BOOK COVERS, you naturally think of HOLDEN.

Get the HOLDEN Habit–It Pays!

HOLDEN PATENT BOOK COVER COMPANY

SPRINGFIELD, MASS.



THOUSANDS OF SCHOOL ROOMS *have* SIMPSON SOUND CONDITIONING

Simpson *Hollokore-drilled* Acoustical Tile is the standard of quality in the sound-conditioning field. This superior tile, with its *clean*, efficient perforations . . . *plus superior installation* by Simpson Certified Acoustical Contractors . . . gives architects, general contractors and school boards *bonus benefits* at lowest possible cost. *Specify* Hollokore-drilled Acoustical Tile by *Simpson*, creators of *Forestone*, the world's first *fissured* woodfiber acoustical tile.

Simpson

ACOUSTICAL TILE

(REGULAR OR SCATTER-DRILLED)

For complete information call the Simpson Certified Acoustical Contractor nearest you . . . or write

Simpson Logging Company,
1005 White Building
Seattle, Washington

SIMPSON CERTIFIED — Simpson — ACOUSTICAL CONTRACTORS

HOME ECONOMICS ROOM, CATHERINE BLAINE JUNIOR HIGH SCHOOL, SEATTLE

Available only through these Simpson Certified Acoustical Contractors

ALABAMA: BIRMINGHAM—Badham Insulation Co., Inc.; MOBILE—Stokes Inc. **ARIZONA:** PHOENIX—Fiberglas Engineering & Supply; TUCSON—Hall Insulation & Tile Co. **CALIFORNIA:** LOS ANGELES and SAN DIEGO—Coast Insulating Products; SAN FRANCISCO and FRESNO—Cramer Acoustics; SACRAMENTO—H. W. Rivett Company. **COLORADO:** DENVER — Construction Specialties Co. **CONNECTICUT:** HARTFORD AND BRIDGEPORT —Wilson Construction Company. **FLORIDA:** CORAL GABLES, FORT LAUDERDALE and WEST PALM BEACH—Ray-Hof Agencies, Inc. (Div. of Giffen Industries Inc.); MIAMI—L. F. Popell Co. **GEORGIA:** ATLANTA—Anning-Johnson Co. **IDAHO:** BOISE—Fiberglas Engineering & Supply. **ILLINOIS:** CHICAGO—General Acoustics Co.; SPRINGFIELD, DECATUR and CHAMPAIGN—George S. Grimmett & Co. **INDIANA:** FORT WAYNE—The Baldus Co., Inc.; INDIANAPOLIS—E. F. Marburger & Son, Inc. **KANSAS:** WICHITA—Kelley Asbestos Products Co. **KENTUCKY:** LOUISVILLE—Atlas Plaster & Supply Co. **LOUISIANA:** SHREVEPORT — Acoustical Engineering Co. **MARYLAND:** BALTIMORE — Lloyd E. Mitchell, Inc. **MASSACHUSETTS:** BRIGHTON—Acoustical Contractors, Inc. **MICHIGAN:** DETROIT, FLINT and GRAND RAPIDS—Detroit Fiberglas Insulation Division. **MINNESOTA:** DULUTH—Flament-Hampshire Co.; MINNEAPOLIS—Dale Tile Company. **MISSISSIPPI:** JACKSON—Stokes, Inc. **MISSOURI:** ST. LOUIS—Hamilton Company, Inc. **MONTANA:** BILLINGS—Kerr & Co. **NEBRASKA:** OMAHA—Kelley Asbestos Products Co. **NEW JERSEY:** FAIRVIEW—Kane Acoustical Co.; KENILWORTH—Connor & Co., Inc. **NEW MEXICO:** ALBUQUERQUE—Fiberglas Engineering & Supply. **NEW YORK:** ALBANY—Davis Acoustical Corp.; BUFFALO, JAMESTOWN—Davis-Fetch & Co., Inc.; ROCHESTER—Rochester Davis-Fetch Corp.; LYNBROOK, L. I.—Robert J. Harder, Inc.; NEW YORK—James A. Phillips, Inc.; STONY POINT—The Cronin Acoustical Co. **NORTH CAROLINA:** CHARLOTTE—Bost Building Equipment Co.; GREENSBORO—The Bonitz Insulation Co. **OHIO:** CINCINNATI—R. B. Brunemann and Sons, Inc., Cincinnati Floor Co.; COLUMBUS—Gatterdam Plastering Co., Reithmiller Acoustic Co. **OKLAHOMA:** OKLAHOMA CITY—Denman Floors Co., Harold C. Parker & Co., Inc.; TULSA—Midwest Marble & Tile Co. **OREGON:** PORTLAND—Emert & Zednik Co., Johnson Acoustical & Supply Co.; EUGENE—Commercial Tile Co.; SALEM—R. L. Eifstrom Co. **PENNSYLVANIA:** PHILADELPHIA—Selby, Battersby & Company; PITTSBURGH—Standard Floor Co. **SOUTH CAROLINA:** COLUMBIA—General Insulation & Acoustics, Inc. **TENNESSEE:** MEMPHIS—Alexander Marble & Tile Co.; NASHVILLE—Nelson Baird Co., Inc. **TEXAS:** CORPUS CHRISTI—Raymond Rambo Materials Company; DALLAS —Blue Diamond Company; EL PASO—Houser Resilient Floor Company; FORT WORTH—Builder's Service Co.; HOUSTON—General Supply Co., Inc.; LUBBOCK—J. E. Delehanty; SAN ANTONIO—Rufus A. Walker Co. **UTAH:** SALT LAKE CITY—Utah Pioneer Corporation. **VIRGINIA:** NORFOLK and RICHMOND — Manson-Smith Co., Inc. **WASHINGTON:** SEATTLE — Elliott Bay Lumber Co.; SPOKANE—Fiberglas Engineering & Supply. **WASHINGTON, D. C.:** ARLINGTON—A. W. Lee, Inc. **WISCONSIN:** APPLETON and MILWAUKEE—Building Service, Inc. **CANADA:** VANCOUVER, B. C. and VICTORIA, B. C. —F. Drexel Company, Ltd.; EDMONTON, ALBERTA—Hancock Lumber Limited.

SIMPSON LOGGING COMPANY • SHELTON, WASHINGTON

Study of food habits shows

Rural Areas Need School Lunch Programs Too

MARION G. JOSEPHI, M.D.
Formerly Assistant Health Officer, Contra Costa County, California

HENRIK L. BLUM, M.D.
Health Officer, Contra Costa County, California

CHILDREN living in an area where food is grown do not necessarily have good, balanced diets. This was shown by a study in three schools in East Contra Costa County, California.* A year's teaching of nutrition, as part of a demonstration health program in two of the schools, brought about slight improvement in the use of body building foods. But there was no marked change in the food patterns of the community. There were, and are, no school lunch programs in these schools, but the quality of the bag lunch brought from home is improving.

Approximately a thousand students from the Brentwood Union and Oakley Elementary schools and the Liberty Union High School participated in the study. They were asked to list all of the food and liquids they had consumed during a one-day period. A year later, on the same day of the week, the same pupils were asked to make another report.

Diet patterns were compared with the recommended daily allowance of the National Research Council. They showed marked deficiencies in Vitamins C and A and a somewhat smaller deficiency in protein-rich foods and milk.

The Brentwood and Liberty schools used many types of teaching aids in their demonstration health programs. Nutrition education was made a part of such subjects as mathematics, general science, and biology. The Oakley school, with no formalized nutrition program, served as the "control."

Some slight improvement was made in all schools in the use of valuable foods, and there was some reduction in use of the less valuable foodstuffs.

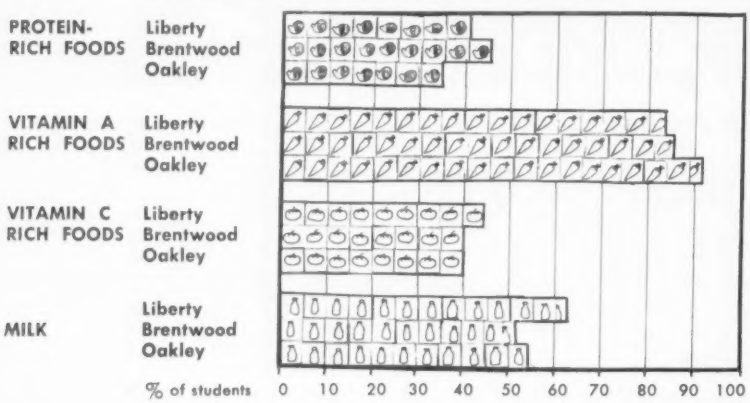
This study indicated to us the need for such programs as the school lunch in agricultural areas. So many people believe that where food is grown diets will be good. This certainly does not seem to be the case in our area.

Any improvement in diet habits of the elementary school child must involve the home as well as the child. A one-day diet pattern can be used as education material for both school and community. Community agencies may be able to give nutrition education to parents and responsible adults who cannot be reached through the school.

But in the schools nutrition could be improved through: (a) a school hot lunch program, (b) a supplemental milk program, (c) a Vitamin C program, or (d) a snack period program. Participation in such nutrition service over a prolonged period of time would help to minimize poor eating habits and would develop a pattern of good food choice.

How study was conducted. We chose the elementary schools of two small towns, Brentwood and Oakley, and their high school, Liberty Union. The Brentwood and Oakley school districts comprise the northwest rim of the rich agricultural San Joaquin Valley, adjacent to the manufacturing towns of the San Joaquin River. Agricultural and factory workers consti-

Graph 1—Symbols Show Percentage of Students Whose Daily Diets Were Deficient in First Test in Three Rural Schools



*Contra Costa County served as a pilot area a few years ago for a program to bring about better health for school children. How county and local school personnel and the public health department cooperated was described in the article, with pictures, "A Pilot Study on Health in the Schools," by Bryan O. Wilson, superintendent, Contra Costa County schools, Martinez, Calif., in The NATION'S SCHOOLS **50**:64 (December) 1952.

Dependable delicacies!

In this glamorous isle in mid Pacific—or amid the bustle of any one of our great metropolitan centers—an exciting and exotic buffet is assured by generous use of Sextons wide assortment of marine delicacies. Playing a stellar role in this, as well as in many entree dishes, is Sexton tuna, so white, so tender, so firm and flavorful. Only select portions of the prize yield of the ocean depths can qualify for the Sexton label on tuna and this is always available in brine.



Kana Inn, Kailua, Hawaii



Sexton
Quality Foods

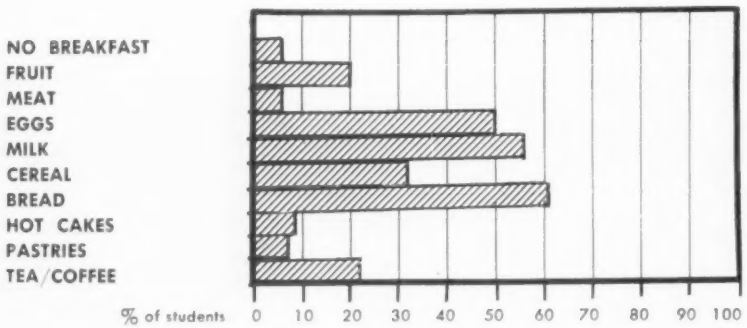
JOHN SEXTON & CO., CHICAGO, 1956

tute more than half of the population (32 per cent each), and retail business people, 13 per cent. Others include craftsmen, truck drivers, government employes, professional persons (1 per cent), and the retired or unable to work (2 per cent).

A large number of Mexican nationals come *without their families* to do much of the seasonal agricultural labor. Few migrant farm families were present at the time of the food study and did not have an influence on it. Large incomes are few. About 50 per cent of the families were in the laboring groups and earned less than $3000 a year. Seasonal farm laborers earned up to $2000 per year. Income levels remained fairly constant throughout the period of the study but were slightly lower in January 1954 when the second food records in the elementary schools were taken.

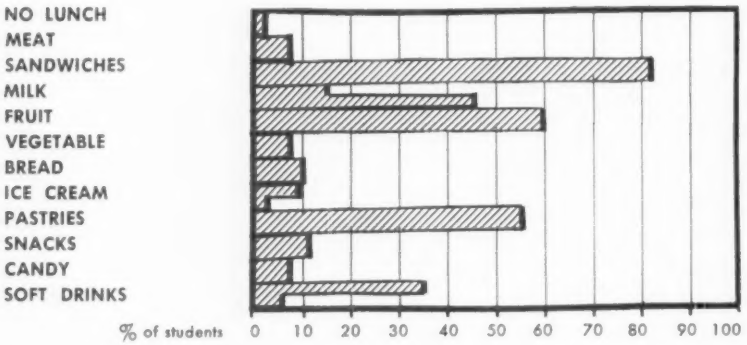
A variety of foods is available in these communities. Fruits, vegetables and nuts are abundant in season, but food is preserved only on a family basis.

Graph 2—Breakfast Diet Reported by Students at Close of Study*



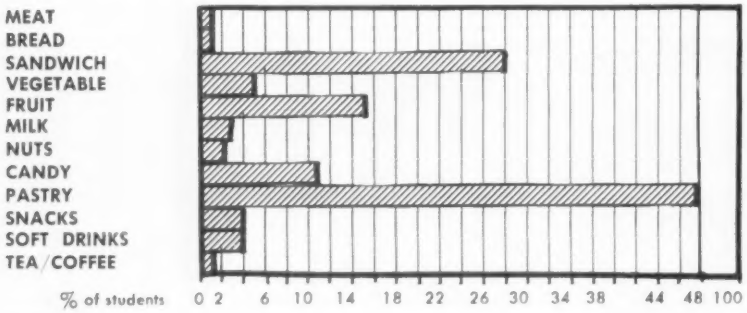
*Average of three similar schools; foods reported by 5 per cent or more of students

Graph 3—Foods Eaten at Lunch, as Reported at Close of Study*



*Average of three similar schools; foods eaten by 5 per cent or more of students
Where bar is divided, upper half shows percentage of high school students; lower half shows percentage of elementary school pupils

Graph 4—Midmorning Snacks Eaten, as Reported at Close of Study*



*Foods eaten by 1 per cent or more of children

Many nutrition teaching aids. In Brentwood Union Elementary School and in Liberty Union High School a demonstration school health program was in progress. In the high school, nutrition education was included in general science, biology and foods classes, and food budgeting was taught in mathematics classes. Teaching aids included movies, posters, demonstrations of good diets, pamphlets and class discussions. Not all students received the same amount of instruction, but all received some.

When given questions on nutrition as part of a general health test at the time of the first diet listing, less than half of the students were able to answer even half of the questions correctly. A repeat examination using the same questions at the end of a year's instruction showed some improvement in the senior group but little change in the remainder of the high school.

In Brentwood Union Elementary School the upper grades were given instruction through posters, films, demonstrations and teaching in class. One class wrote and presented a nutrition play to the school and parents. When tested at the onset of the testing period about two-thirds of the pupils had a good knowledge of the questions. Following a year's instruction this percentage rose to more than three-fourths.

In the Oakley school no separate health program was in effect.

Report of one-day diets. At school each pupil listed all the items of food and drink he had taken at breakfast, midmorning snack period, and lunch on that day. He also reported the afternoon snacks, dinner, and evening snacks of the preceding day. This reporting was repeated exactly one year later—on the same day of the week, so that seasonal and other influencing factors would be minimized.

A form for these records was prepared with the aid of the nutrition service of the California State Department of Public Health. A nutrition consultant from the service worked with the school administrators and

Here's Premium Hobart Quality— *at a New Popular Price*



Yes—We've Laid It Right on the Line!

You've dreamed of a peeler like this—and now it's a stainless steel, portable, low-cost, high-efficiency reality. We gave our development engineers a sales ceiling-figure so low it will amaze you. We specified no short cuts in Hobart quality, durability and performance. And they've successfully met both challenges by designing the industry's most outstanding buy!

Look over the partial specifications listed, and you'll agree. Think for a minute of the solid reputation of the great Hobart food, kitchen and dishwashing machine line—world's most complete. Then send the handy coupon below—quick—for complete information including price. ***The Hobart Manufacturing Company, Troy, Ohio.***

THE HOBART MANUFACTURING COMPANY, Troy, Ohio
Dept. ADV.—Peeler

Please send me without obligation the following information on your newest Peeler Model 6115.

- ☐ Please send specifications and quote price on ☐ Peeler Unit only.
- ☐ Peeler plus combination cabinet base and trap for floor installation.
- ☐ Please send a Hobart Representative with all the information.

NAME_____ TITLE_____

COMPANY_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

CONVERTIBLE to cabinet floor machine. Accessory combination stainless steel cabinet-base and trap attaches easily with 4 screws at 90°, giving 4 installation possibilities—front, rear, right and left side discharge.

PORTABLE PEELER—weight, 86 lbs.

STAINLESS STEEL construction—unbreakable grey plastic top.

TIMER—synchronous adjustable 4 min. Available with tumbler-type switch instead, at reduced cost.

CAPACITY—15 to 20 lbs. in 1 to 3 min.

DURABLE—it's Hobart-built—Hobart guaranteed!

COST—You won't hesitate a minute! Send the coupon now.

Trademark of Quality Hobart for over 55 years

Hobart
Food Machines

The World's Largest Manufacturer of Food, Kitchen and Dishwashing Machines

DO YOU USE THESE DELKOTE PRODUCTS?

BOOK-SAVER®—the original liquid plastic for book repair—is in use in thousands of school classrooms and libraries—to mend broken backs, replace loose pages and signatures, and make almost invisible repairs on torn pages.

These schools tell us that BOOK-SAVER has two distinct sets of values. Teachers like it because even third-graders can use it successfully, and book repair teaches book care. School administrators find it a money-saving tool, because an 8-ounce bottle makes more than 100 major book repairs at a material cost of less than 2c apiece.

BOOK-SAVER comes in 8-ounce squeeze-bottles with handy applicator tip at $1.95; also 32-oz. wide-mouth glass jars for economical refilling.

BOOKOTE®—a specially formulated coating material—provides maximum protection for book covers against water, dirt, and wear. Paper or plastic covers are not needed. The color and appeal of the original cover designs are preserved, and the books are simply wiped clean with a damp cloth.

BOOKOTE is proving almost as universally popular as its companion product BOOK-SAVER. Many school systems make a practice of giving every new book, texts and library volumes alike, a protective coating of BOOKOTE before releasing for service.

In glass bottles for heavy-duty brush application, and in 12-ounce aerosol cans for easy spraying. The $1.95 size in either form will coat the entire covers of 50-75 average-size books.

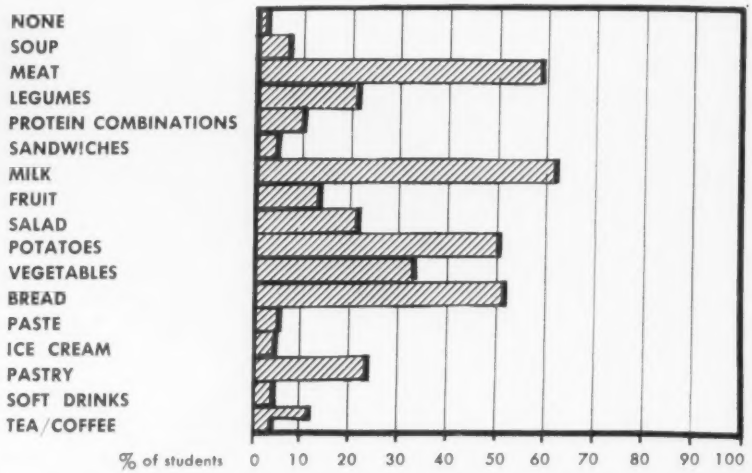
55-5-1

BOOK-SAVER and BOOKOTE are sold by all leading school supply distributors. If your regular supplier does not carry them, order direct.

DELKOTE, Incorporated
Box 1335, Wilmington 99, Del.
Box 574, Berkeley, California

Also makers of DEL-FIX, DELKOTE WOOD LACQUER, DELKOTE METAL LACQUER

Graph 5—Foods Eaten at Evening Meal, as Reported at Close of Study*



*Average of three similar schools; foods used by more than 5 per cent of students

teachers to interpret its use and to assist them in explaining it to the pupils.

The collected data were coded and tables were compiled to show the intake of individual food items, food groups, and meals (see graphs).

Nutrition requirements. The food pattern of the community was considered in relation to *daily* dietary allowances for young adolescents recommended by the National Research Council. Four basic foods and food groups were the foundation of this study:

Protein (meat, poultry, fish, legumes, cheese, eggs): 2 servings of meat or equivalent in other protein-rich foods.

Vitamin C (citrus fruits, tomatoes, cabbage or green salad, and potatoes): 1 citrus fruit or its equivalent in other Vitamin C rich foods.

Vitamin A (green leafy vegetables, yellow vegetables): 1 serving.

Milk: 3 glasses.

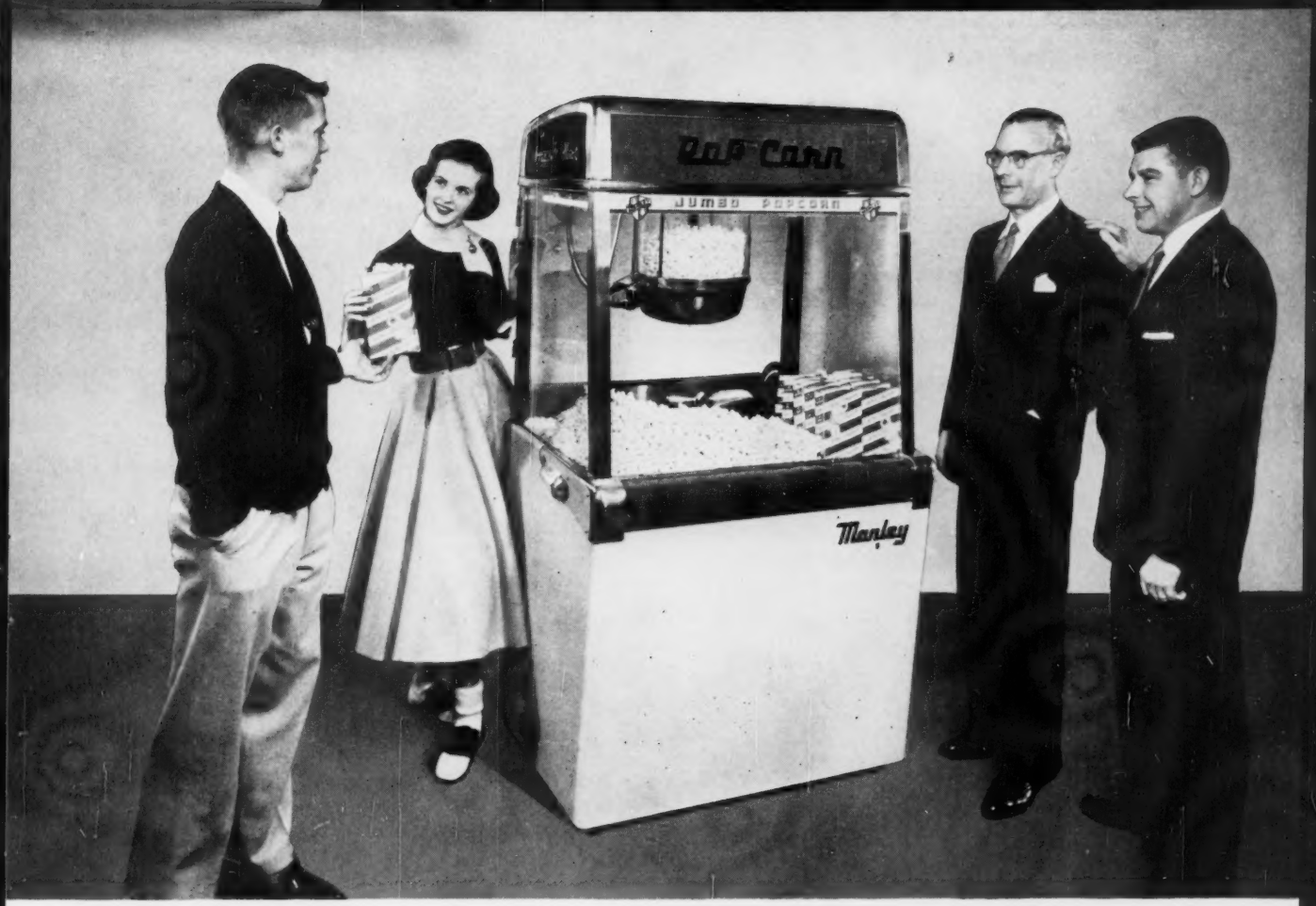
Results of first test. The first testing (Graph 1) showed that almost half of the young people ate foods low in protein and in Vitamin C, between 80 and 90 per cent had diets low in Vitamin A, and about 50 per cent did not drink enough milk.

Changes in food habits after one year. Although dietary records covered only one day for all children, they did seem to represent a pattern. An increase in the use of milk was reported in all schools. Some increase in protein use was reported in the high school and in Brentwood Elementary School. The Vitamin A foods were not well used in the high school and especially in Oakley, the control school. There was an increase in the use of Vitamin C foods in the high school, but less use of these foods was reported by the elementary schools. The major increase in the use of all four foods was shown in the high school.

The most consistent change was the *decrease* shown in the use of the less nutritious foods—coffee, soft drinks, candy and pastry. Whether this change was due to a desire for a better diet or to chance availability of the products is unknown. The reporting of fruit (other than citrus) and vegetables showed a slight increased usage on the second test.

In all, changes in food pattern were slight. At the time of the repeat survey there was a slight decline in the financial status of the community as shown by welfare rolls, so that any improvements shown would probably not be the result of more available funds.

Nutrition still inadequate. The over-all deficit shown in Graph 1 was essentially the same at the end of the one-year testing period. Protein-rich foods were still below the recommended allowance for one-third to one-half of the children. Vitamin A foods continued below recommended intake in from 80 to 90 per cent of the diet reports. Vitamin C foods were low for about 40 per cent. Milk remained below the recommended al-



THE MANLEY MAN

Watches a winner...

. . . at Central City High.

That's the Manley Man standing to the left of Mr. Humphries, the principal. This is a special occasion—it's the first day of operation for the school's brand new Manley VistaPop popcorn machine.

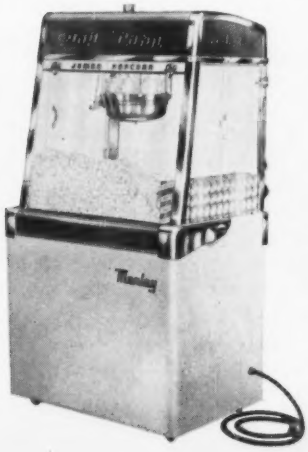
"Your students certainly seem to go for that hot popcorn, Mr. Humphries."

"Yes, we've often talked about having our own popcorn machine here in the school, but we never seriously considered one until you told me about this VistaPop machine."

"You're just one of many school principals, Mr. Humphries, who have discovered the potential of owning and operating a modern popcorn machine."

"The students are happy about having the popcorn now, but they will be even happier when we start using the money we make from our machine, to buy new band uniforms and instruments, athletic equipment and all the things we've wanted for such a long time. Yes! I'm sure we've picked a winner."

"Believe me, Mr. Humphries, you just can't lose with a Manley VistaPop!"



THE NEW MANLEY VistaPop®

IS IDEAL FOR YOUR SCHOOL

This newest of all popcorn machines is easiest of all to operate because it's semi-automatic. Any student can become an expert operator after just a few minutes of instruction. The VistaPop requires only 9 square feet of floor space. Operational costs are low . . . profits are big . . . providing your school with extra funds for your extra-curricular activities. Just fill in and mail the attached coupon for full details on how your school can benefit from this newest of all popcorn machines.

MANLEY, INC., 1920 Wyandotte Street, Kansas City 8, Missouri, Dept. NS-356

☐ Send me more information on how my school can benefit with the new Manley VistaPop.

☐ I would like to talk with The Manley Man. I understand there is no obligation.

Name _____

Title _____

School _____

City _____ Zone _____ State _____

lowance in from 50 to 60 per cent. By breaking down the dietary pattern into individual meal patterns, we noted that not only were individual food groups low, but many reports showed a lack of sufficient combination of foods to make a nourishing meal.

Breakfast was poorest meal. Virtually all pupils began the school day with an inadequate meal. Six per cent said they ate no breakfast. A combination of fruit, protein and milk was considered a desirable morning meal. From 90 to 95 per cent of the students failed to report this breakfast (Graph 2). Chief foods were bread, milk and eggs for from 50 to 60 per cent of the students. Cereal was listed by about one-third and fruit by less than one-fourth. About 20 per cent reported drinking either tea or coffee. Only 56 per cent drank milk.

Lunches brought from home. The lunch report is based primarily on bag lunches which children brought from home. No school lunch was served, nor was there a lunchroom. A small number of students went home for lunch. A third of the children ate no lunch.

The great majority of the elementary school children ate their lunch in the classroom, and milk was available through a partially subsidized milk program. No milk was sold in the school.

High school students ate their bag lunches on the grounds or in the corridors.

Some of the students went to one of the town eating places where sandwiches and soft drinks are the popular fare.

Food patterns for all three schools were sufficiently similar to be averaged (Graph 3). In instances where a difference existed between the high school and elementary school groups, both have been shown.

Lunches of 50 per cent or more of the students consisted of sandwiches, fruit and pastries, with milk almost reaching this per cent in the elementary school. In the high school only 15 per cent reported milk and 35 per cent reported soft drinks. Only 5 per cent of the elementary children listed soft drinks. Meat and vegetables were reported by only 5 per cent.

A desirable lunch was considered to consist of a protein-rich food, fruit and milk. The protein requirement for a noon meal was pretty well met. Fruit was eaten by at least two-thirds of the students. But more than 90 per cent of the high school students and almost 80 per cent of the elementary pupils failed to list the three basic food groups—protein-rich foods, fruit and milk.

Snacks are early lunches. Oakley (the control school) had a snack period during morning recess. In the high school and Brentwood Elementary School no time was set aside for eating between meals.

But 20 per cent of the Brentwood and Liberty High School students and 40 per cent of the Oakley students reported midsession snacks. Many of the children dipped into their lunch boxes between classes and ate a portion of that meal, and so the midsession snack appears to be nutritionally of much value (Graph 4).

The chief foods consumed were sandwiches, fruit, candy and pastries, a pattern similar to that reported for lunch. These foods probably would have been consumed at lunch if not eaten at snack time.

Since candy was available in the high school it is natural to see an

New Life



NO. C-282 Multi-Level Circulation Desk. A desk with MICOLOR top and shelving wing. Cabinet on exterior side closed with sliding doors.

THE FINEST IN LIBRARY FURNITURE

Finest because Sjöström emphasizes quality, looks ahead to tomorrow, meets new needs with new designs.

Just introduced are the units shown and MICOLOR—Formica tops in 4 basic colors.

Catalog L-54 describes the "New Life" line; Circular C-553 describes the units shown and MICOLOR tops. Ask for either or both.



NO. 291-30RS Reference card catalog with Unit. Combines 30 drawer auxiliary shelving (reverse side) and counter-height table.



200-series FREELINE table with MICOLOR top in satin smooth Formica.

SJÖSTRÖM OF PHILADELPHIA

1717 NORTH TENTH STREET, PHILADELPHIA 22, PA.



Heinz low-cost meatless specials

TRY YOUR CHOICE AT OUR EXPENSE!

Here are two wonderful ways to improve Friday menus. Heinz Spanish Rice and Macaroni Creole! They're really delicious. (And we hope you'll mail the coupon for a big free demonstration tin, to see how delicious!) There's no work to preparing them. They're satisfying—full-flavored—ready to serve—and inexpensive! Only 9¢ for a 6-ounce serving, 12¢ for an 8-ounce. Taste and see for yourself. Mail the coupon!



HEINZ

CHEF 57 SIZE

HOT PLATE LUNCHES

BEEF STEW • BEEF GOULASH • CHICKEN STEW WITH DUMPLINGS
CHOP SUEY • MACARONI CREOLE • SPANISH RICE • LAMB STEW
CHICKEN NOODLE DINNER • ***You know it's GOOD because it's Heinz***

MAIL FOR FREE 51-OZ. DEMONSTRATION TIN

H. J. Heinz Company, Hotel & Restaurant Division
P.O. Box 28, Pittsburgh 30, Pa.

I'll try one of your meatless dishes—no cost, no obligation.

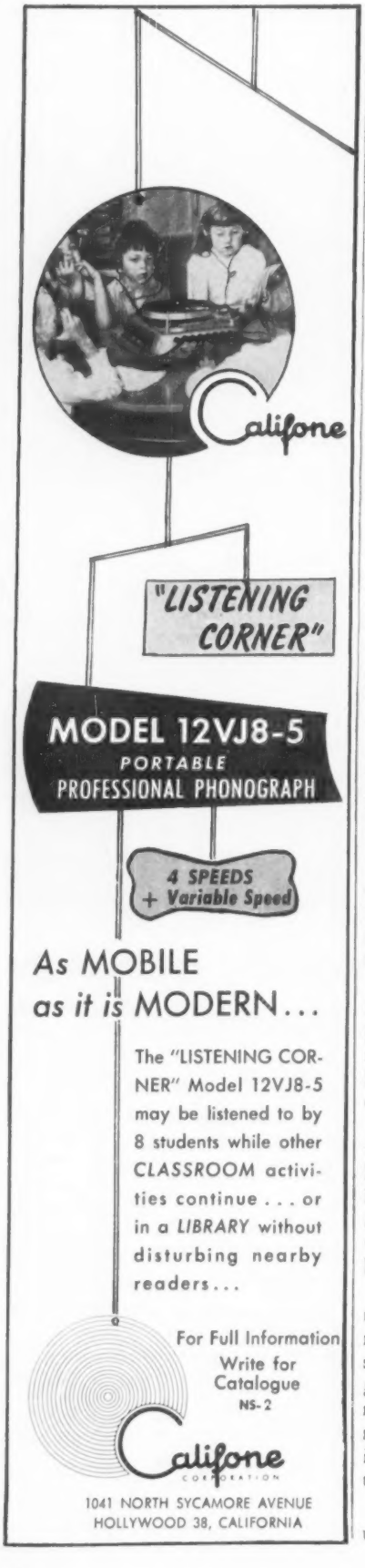
I prefer ☐ Macaroni Creole ☐ Spanish Rice

Name_____

School or Company_____

Street_____

City_____ Zone____ State_____



increase in candy consumption as a snack item.

Evening meal also deficient. At the end of the testing period, a true diet deficiency still existed. It was evident in the evening meal, as well as for breakfast and lunch. Only 3 per cent reported omitting a meal at this time.

A desirable evening meal was considered to consist of a protein-rich food, milk, fruit and vegetables. A greater variety of foods was reported at the evening meal than at either of the previous meals. The chief items were protein-rich foods (meat, legumes or protein combinations), milk, bread, potatoes, vegetable, salad and pastry. Listed by 20 per cent or more of the pupils were meat and milk. Bread and potatoes were mentioned by 50 per cent or more.

Protein-rich foods, listed by from 85 to 90 per cent of the pupils, represent the best usage of any of the basic food groups at any meal (Graph 5). Milk, the next best reported food, was deficient in amount in about 35 per cent of the reports. Vegetables were lacking in about half of the diets, and little fruit was eaten.

The number of pupils who did not list foods in all four of the basic food groups was 95 per cent or above, and between 65 and 70 per cent failed to include three of the basic food groups.

What schools can do. The school can participate in two ways in improving pupil diets: (1) by food and nutrition *education,* and (2) by nutrition *services.*

One outstanding factor implied in the results of our study is that the improvement in food usage depends on nutrition knowledge of the person who buys the food and his ability to act on his knowledge.

Greater improvement took place in the high school where the student had a greater opportunity to purchase his own food. For real improvement in the younger child's food pattern, we suspect that the education must be aimed equally at the parents.

To be effective, school food and nutrition education programs must reach all ages. More stress on the high school age student might show the greatest immediate gain. The community agencies dealing with homemakers must take part in the program if it is to reach the food buyer and the table of the younger child.

Nutrition education. Nutrition education was formalized to some extent in the Liberty Union and Brentwood schools. Throughout this study it seems that slightly greater gains were made here than in Oakley, the control school that had no special nutrition program. Since many of the same families were involved in the Oakley Elementary and Liberty High schools, it seems that this might also indicate a difference in respondence to food and nutrition education at the elementary and secondary levels.

Nutrition services. The school can improve the diets of children during school hours. Several possibilities are:

1. *Hot lunch program.* Such a meal could meet at least a third of the daily recommended allowance of protein, a great part of the vitamin requirements, and from one-third to one-half of the milk requirement.

2. *Milk program.* This can account for one-third or more of the milk recommended for a child's daily diet. Education of parents is important to bring about greater participation in this program. Although there is a charge for milk, funds are usually available for those unable to pay.

For high school students, milk could be made available through a dispensing machine, if it could be adequately serviced.

3. *Citrus program.* An orange or its equivalent in citrus or tomato juice could provide nearly the entire daily need for Vitamin C. This might require cooperation of a responsible agency with the school to cover the needs for some of the students.

4. *Snack program.* Both time and desirable foods should be considered. Little value exists in having one without the other. In some areas the time is provided, but the only food source is the child's own lunch box. In others, neither time nor food is available. A Vitamin C program at snack period would be valuable. The availability of protein foods, such as sandwiches and milk, would also greatly strengthen the general diet.

Improvement slow but steady. We are continuing to work in the area, and, while we still do not have a school lunch, continued stress on nutrition is improving the quality of the bag lunch brought from home. The nutritional status of the group is improving, though the rate is not fast enough to make a statistical evaluation of it.

We believe our study points up the need for such programs as the school lunch in agricultural areas.

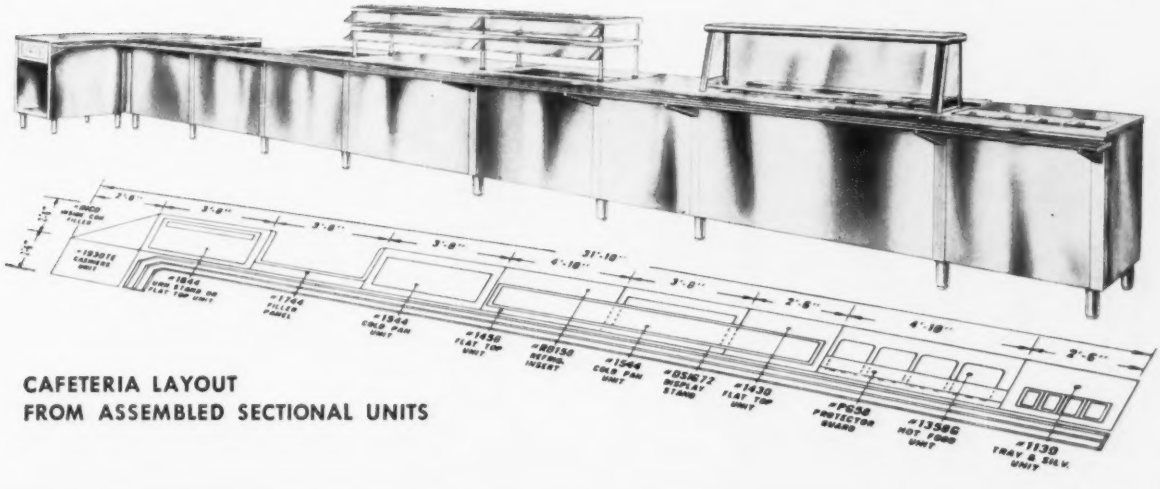
Sectional
FINEST CAFETERIA COUNTERS FOR INCREASED ENROLLMENT



Fall is nearer than you think—many more children will hear the school bell ring.

If your present feeding facilities are overburdened now—plan to meet the bigger load well in advance of the Fall needs.

Southern Dealers all over America are highly trained specialists in food preparation and food serving equipment. Consult one today—or write Southern Equipment Co., 4550 Gustine Ave., St. Louis 16, Missouri.



CAFETERIA LAYOUT
FROM ASSEMBLED SECTIONAL UNITS

"CUSTOM-BILT BY SOUTHERN" DEALERS: Arnholz Coffee & Supply Co., **Wichita, Kans.** • Aslesen Company, **Minneapolis, Minn.** • Bolton & Hay, **Des Moines, Iowa** • Buckelew Hardware Co., **Shreveport, La., and Texarkana, Ark.** • Buller Fixture Co., **Omaha, Nebr.** • Carson Hotel Supply, **Denver, Colo.** • S. J. Casper Co., **Milwaukee, Wisc.** • Jack Conkle, Inc., **Miami, Fla.** • El Paso Hotel Supply Co., **El Paso, Texas** • Ezekiel & Weilman Co., **Richmond, Va.** • Fargo Food & Equip. Co., **Fargo, N. D.** • Food Equipment Co., **Greenville, S. C.** • Food Service Equip. & Engr. Corp., **Tampa, Fla.** • General Hotel Supply Co., **Columbus, Ohio** • Goodner Van Co., **Tulsa, Okla.** • Greenwoods Inc., **Kansas City, Mo.** • Heilbron-Matthews Co., **Lexington, Ky.** • Hertzel's Equipment Company, **Peoria, Ill.** • House-Bond Co., **Memphis, Tenn.** • S. S. Kemp Co., **Cleveland, Ohio** • Kirchman Brothers Co., **Bay City, Mich.** • Krebs Bros. Supply Co., **Little Rock, Ark.** • H. Lauber & Co., **Cincinnati, Ohio** • McKay-Cameron Co., **Nashville, Tenn.** • A. J. Marshall Co., **Detroit, Mich.** • Mobile Fixture Company, **Mobile, Ala.** • Wm. H. Morgan Co., **Jacksonville, Fla.** • Mountain City Stove Co., **Chattanooga, Tenn.** • National China & Equipment Corp., **Indianapolis and Marion, Ind.** • Northwest Fixture Co., **Billings, Mont.** • Parsons-Souders Co., **Clarksburg, W. Va.** • Restaurant & Store Equip. Co., **Salt Lake City, Utah** • Rowland Equipment Co., **Toledo, Ohio** • Arthur F. Schultz Co., **Erie, Pa.** • E. Carleton Scruggs, Inc., **Knoxville, Tenn.** • Southwestern Hotel Supply, Inc. **San Antonio, Texas and Corpus Christi, Texas** • Turner-Haack Co., **Orlando, Fla.** • Vulcan Equipment & Supply Co., **Birmingham, Ala.** • Ward-Morgan Co., **Daytona Beach, Fla.** • J. S. Waterman & Co., Inc., **New Orleans, La.**

SOUTHERN
EQUIPMENT COMPANY

All equipment fabricated by Southern is approved by National Sanitation Foundation.

Expanded Services to Business Officials

being planned from New Headquarters in Evanston, Ill.

A visit with CHARLES W. FOSTER
executive secretary, Association of School Business Officials

THIS year begins a new era in the history of the Association of School Business Officials of the United States and Canada. The dream of years came true when the association set up new headquarters in Evanston, Ill., with space and facilities for more field service and research. The transition was almost simultaneous with the beginning of the term of office of J. Wilbur Wolf, business manager at Omaha, Neb., as president and of Charles W. Foster as executive secretary. Dr. Foster succeeded Harley W. Anderson, whose illness necessitated his retirement after 10 years as secretary.

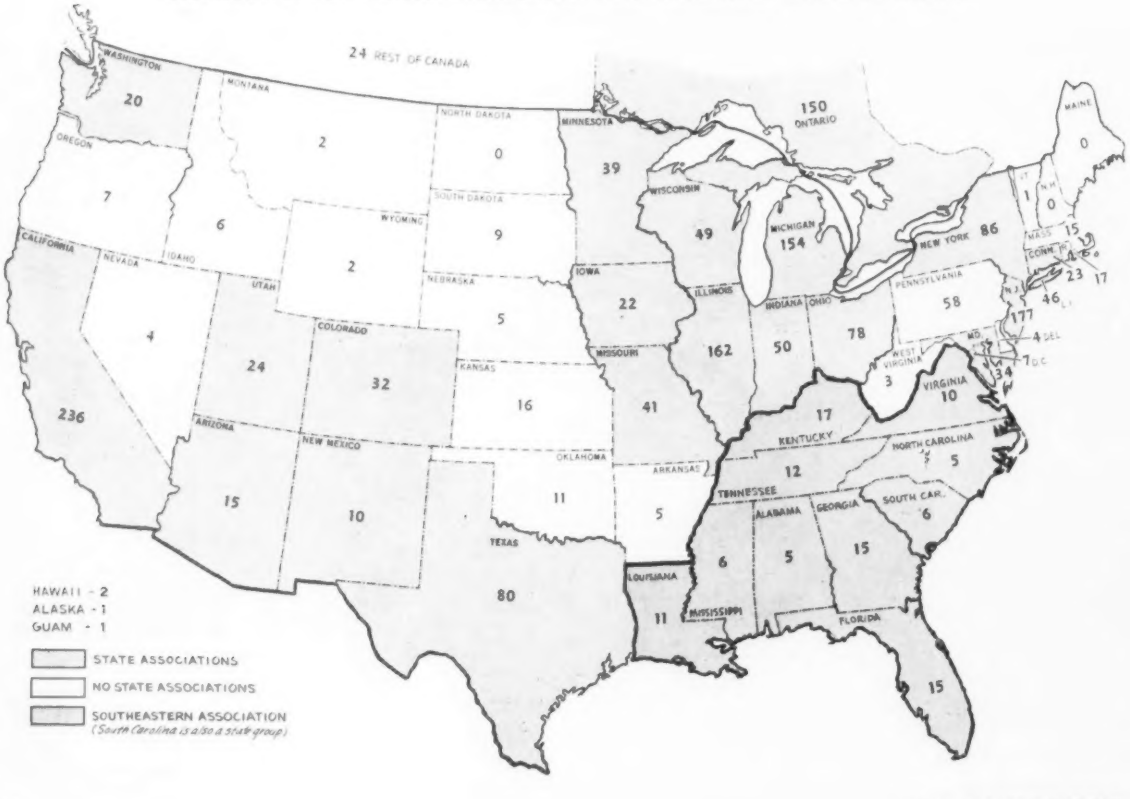
The editor of The NATION'S SCHOOLS dropped in for a visit with Dr. Foster about A.S.B.O.'s future plans. The gist of the interview follows:

Why was Evanston — or the Chicago area—chosen as the location of the new A.S.B.O. international headquarters?

Several factors were taken into consideration. The Chicago area is the geographical "hub" of the United States and Canada, centrally accessible by various means of transportation, telephone and written communication. It is located fairly close to Canada and is therefore more available to Canadian members than many other possible locations would have been. The A.S.B.O. executive board was impressed with the ease of accessibility to Chicago, not only by air but also by rail, automobile and even steamship.

The actual location at 1010 Church

DISTRIBUTION OF A.S.B.O. MEMBERSHIP AND AFFILIATED ORGANIZATIONS



CARING FOR WAXED FLOORS IS . . .



A cinch with Sanax

It waxes as it cleans!

REDUCES THE FREQUENCY OF REFINISHING

Sanax was developed to permit frequent cleaning of waxed floors *without washing away the finish* . . . and to eliminate waste in wax and labor. A neutral liquid soap with a wax base, *Sanax* not only quickly removes dirt, oil, and grease, but *leaves a thin film of wax.* In fact, regular use of *Sanax* to machine-scrub or damp-mop waxed floors *actually prolongs the life of the finish,* and thereby reduces refinishing costs on a year-to-year basis.

Like all *Finnell Fast-Acting Cleansers, Sanax* is specially designed for the greater speed of machine-scrubbing, and works as effectually in a *Combination Scrubber-Vac* as in a *Conventional Scrubber-Polisher.* And because *Sanax* is processed from pure vegetable oils, it's *safe for all floors.*



A 100 Series General-Purpose Finnell 11, 13, 15, 18"

Find out how you can simplify and reduce the cost of caring for waxed floors. *There's a Finnell Floor Specialist nearby* to help you choose the waxes and cleansers that are *exactly right for your needs. Finnell* makes a complete line, so you can depend on unbiased advice. In fact, *Finnell makes everything for floor care!* For consultation, demonstration, or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 203 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



- **A mild liquid wax-soap for machine-scrubbing or damp-mopping waxed floors**
- **Leaves a lustrous anti-skid protective finish**
- **Highly concentrated . . . economical to use**

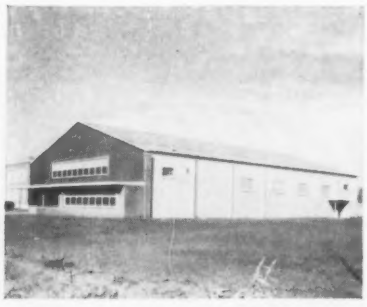
FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines

Everything FINNELL for Floor Care

BRANCHES IN ALL PRINCIPAL CITIES

OVERCROWDING: a critical school problem



This school solved space problems by combining Butler structurals and roof with other materials to produce a handsome gymnasium at bedrock cost.

...with a low-cost solution—BUTLER metal buildings

One of the toughest problems school districts face—providing, at reasonable cost, classrooms, auditoriums, and gymnasiums for an ever-increasing enrollment—is one of the easiest to solve with Butler metal buildings. To begin with, pre-engineered and mass-produced Butler buildings cost substantially less than conventional construction. The strong rigid frames and tough, die-formed, weather-tight cover panels go up so fast (sometimes months ahead of other construction) that labor costs are pared to the core. Further expansion, when necessary, is easy and entirely compatible with limited budgets—and is done with 100% materials salvage. For information on other Butler metal building features, mail coupon below for catalog.

Consult the yellow pages of your telephone directory for name of your nearest Butler Builder

BUTLER STEEL PRODUCTS

Steel Buildings • Oil Equipment
Farm Equipment • Dry Cleaners Equipment
Outdoor Advertising Equipment
Special Products

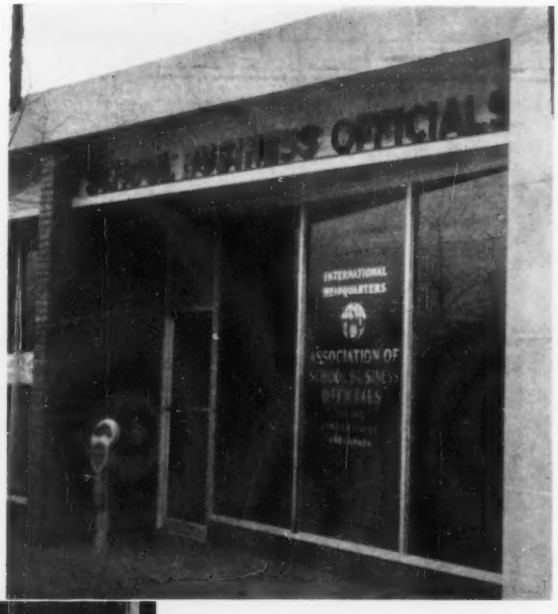
Sales offices in Los Angeles and Richmond, Calif. Houston, Tex. • Birmingham, Ala. • Minneapolis, Minn. Chicago, Ill. • Detroit, Mich. • New York, N.Y. Burlington, Ontario, Canada

BUTLER MANUFACTURING COMPANY
7318 East 13th Street, Kansas City 26, Mo.
Send catalog giving full information on Butler steel buildings.

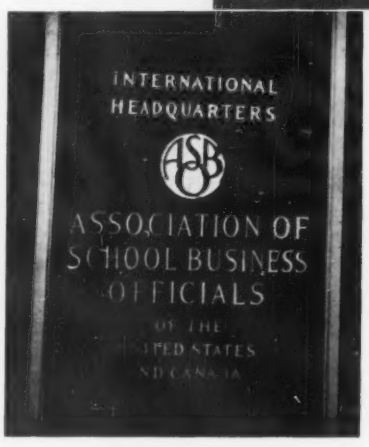
Name .....

Address .....

City ..... State .....



The new location of the international headquarters office of the A.S.B.O. is in a new building in downtown Evanston, Ill.



Street in Evanston was chosen after a great deal of consideration for a variety of reasons: The office is now located in a newly constructed and completely fireproof building near the heart of downtown Evanston, within walking distance of several first-class hotels, and also within walking distance of Northwestern University—and its research facilities. It also is convenient to public transportation, which makes other research facilities in the Chicago area easily accessible. Last, but by no means least, it is centrally located within an active local group of professional men: the Suburban School Business Officials of the Chicago area.

Where and when is the next convention?

It is scheduled to be held in the largest hotel in Washington, D.C.—the Sheraton-Park — from Sunday through Thursday, October 7 to 11. More details will be available following the A.S.B.O. executive board meeting in Washington, D.C., February 23 to 25.

Exhibits will be housed in exhibition hall underneath the new ballroom. The Sheraton-Park Hotel is reserving 600 rooms, including suites, for this convention, and the overflow will be handled in the Shoreham Hotel, just around the block.

How many state and regional organizations are affiliated with A.S.B.O.?

There are 20 formally organized state associations affiliated with the international office, not including the two regional associations located in Ontario, Canada, and in the southeastern United States. The Southeastern Association of School Business Officials is a regional organization comprising 10 states, as indicated on the accompanying map. In addition to the state and regional organizations, there are at least two local groups recognized: the Long Island chapter of the New York State Association of School Business Officials, and the Suburban School Business Officials of the Chicago area. The accompanying membership map indicates where the organization is strong, and where it needs to do missionary work.

What are your plans for placement service?

The headquarters office is presently expanding its placement service, which operates in conjunction with central

A SIMPLE, EASY WAY TO TAKE ADVANTAGE OF U.S. SCHOOL MILK PROGRAM

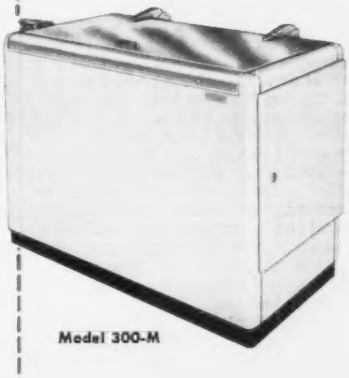
Government agency urges increase in student milk consumption for better health

Students drink more milk when it is available throughout the school day. For an example: when milk venders were placed in Chicago schools, children consumed 70% more milk; in a Woodstock, Illinois, school with 660 students, 400 one-half pints were vended daily; and, 240 students in a Wisconsin school consumed 2800 full pints in one month. With an Ideal Milk Vender in your school, healthful, dairy-fresh milk is made available to students during all out-of-class moments. It is dispensed refreshingly cool under sanitary conditions. A coin-operated Ideal Milk Vender operates efficiently—needs no attendant. Its dry refrigeration completely eliminates watery messes. Investigate now how an Ideal Milk Vender increases milk-drinking among students, and pays for itself under the new U. S. School Milk Program.





Model 70M



Model 300-M



For complete information on how you can have an Ideal Milk Vender as part of your U.S. School Milk Program, write today to:

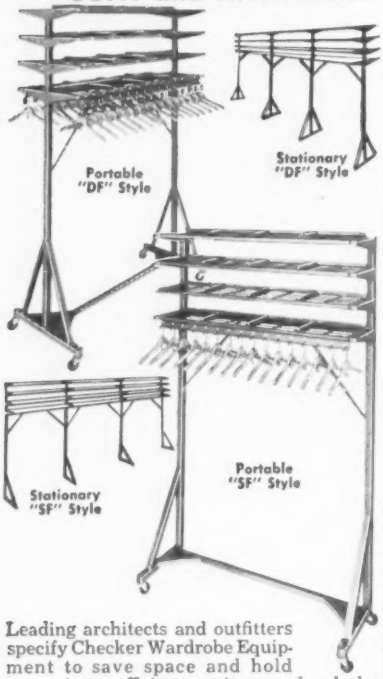
Ideal DISPENSER CO.

Dept. 2002 • BLOOMINGTON, ILL.

Factories in Bloomington, Illinois; Columbus, Ohio; Ideal Vender Company of Canada, Ltd., Montreal, Quebec

THERE IS AN IDEAL SELECTIVE VENDER FOR EVERY SCHOOL REQUIREMENT

Checker®
COAT and HAT RACKS

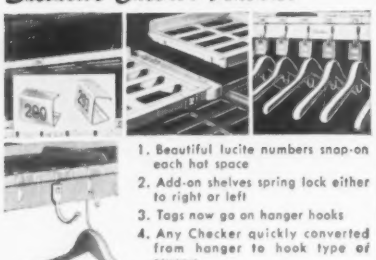


Leading architects and outfitters specify Checker Wardrobe Equipment to save space and hold wraps in an efficient, sanitary and orderly manner. Hats rest on high ribbed, slotted shelves. Spaced hangers keep coats apart, open to light and air, visible and instantly available. SF Style units accommodate 4 or 5 persons per foot. DF style units accommodate 8 or 10. 3'2", 4'2" and 5'2" long "portable" units go wherever needed on large casters. "Stationary" units come on glides and can be anchored to floor. "WM" Style racks mount directly on any wall. All Checker racks are correctly engineered to interlock on left or right and to stand up under a full load. They will not tip over, sag, sway, creak or wobble. Built for lifetime service of strongly welded heavy gauge steel and square tubing and beautifully finished in modern baked on colors. They are vermin-proof and fireproof.

Style WM wall RACKS



Exclusive Checker Features



1. Beautiful lucite numbers snap-on each hat space
2. Add-on shelves spring lock either to right or left
3. Tags now go on hanger hooks
4. Any Checker quickly converted from hanger to hook type or reverse

Write for Bulletin CK-25

VOGEL-PETERSON CO.
1127 W. 37th Street • Chicago 9, Ill.

headquarters, and I, as executive secretary, am also the placement director. There is no charge for this placement service, but it is limited to members. It works in this fashion: Superintendents, school boards, and other school administrators send in to A.S.B.O. headquarters notices and descriptions of vacancies that occur in the field of educational business management. The positions include those of school business manager, building supervisor, purchasing agent, board secretary, director of cafeterias, director of maintenance, supervisor of accounts, and assistant superintendent in charge of business. This placement service handles school business management positions exclusively. The description, including salary range, is printed in the association's monthly publication.

The central office does not at the moment have a staff large enough to handle files of credentials for each of its members, and so at the present time it is operating the placement service entirely on a voluntary basis. The results to date have been encouraging, and it promises to expand into a free service that will be appreciated by both administrators and school business officials.

What is being done in sponsoring or promoting research?

At the October 1955 executive board meeting, S. C. Joyner, business manager of the Los Angeles schools, reported that the A.S.B.O. fire insurance study is the best one of its kind the organization has ever made. He expects it to be completed by July 1956.

At the February executive board meeting, the board is expected to take definite action to "shop out" a research project to some university concerning a painting chart, *i.e.* determining how much area a man with a 4 inch paint brush can be expected to cover in one day on different types of surfaces.

The organization has been cooperating with the U.S. Office of Education in the development of a new National Accounting Manual for Schools. Joseph P. McElligott of San Francisco is the A.S.B.O. chairman of this committee.

The organization hopes to work much more closely with more universities in the future in connection with various aspects of research in the field of educational business management, both for individual studies, *i.e.* master's theses or doctoral dissertations, and for independent research conducted by the university.

A professional library is being organized in the headquarters office. It is hoped this professional library will be able to make a real contribution to the field of educational business management, by assembling the best known research in the field and by making it available to the members of the association.

George W. Grill, official historian, will take charge of the organization and development of the professional library this summer.

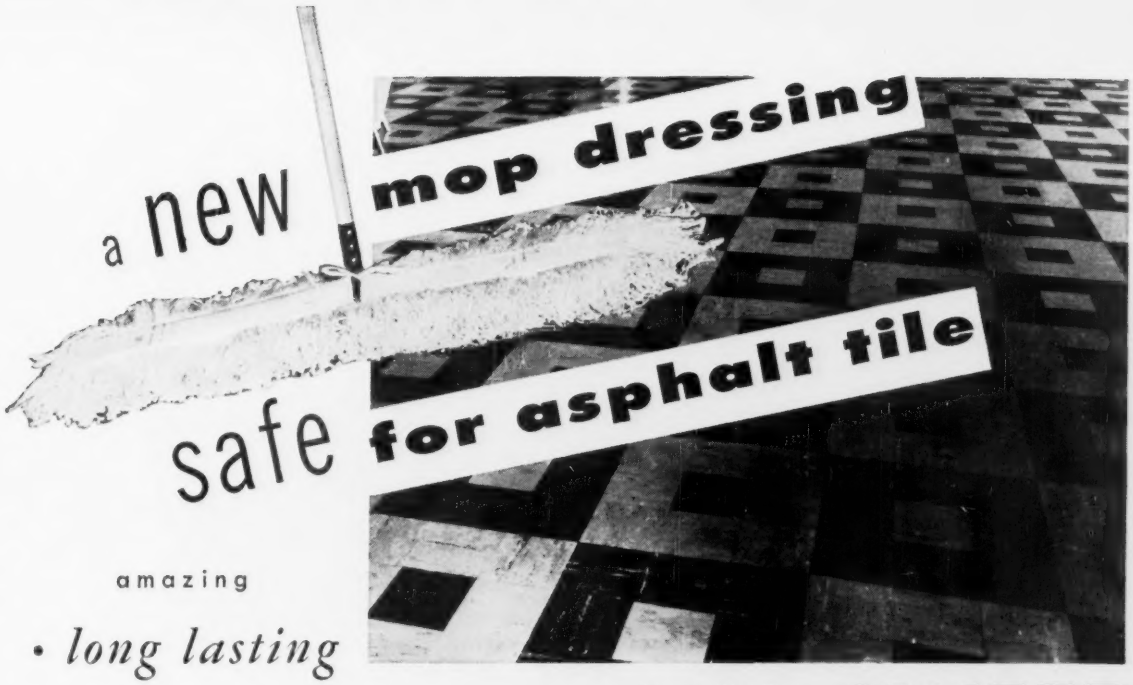
The Association of School Business Officials maintains research committees in eight different areas: accounting and finance, cafeteria, insurance, maintenance and operations, personnel, purchasing, schoolhouse planning and construction, and transportation. The research committees are continually exploring these areas; they make reports and recommend additional studies in the A.S.B.O. annual meetings held each October.

What are you doing with field service?

The organization is not doing as much with field service at the moment as it plans to do in the future. A.S.B.O. has a new membership category known as a "service membership." This is designed primarily for small school districts that do not employ a full-time school business official. This new school district membership will be emphasized by the organization in 1957. It will mean that information can be obtained from the headquarters office and also that selected school business officials who are authorities in a particular field will be able to act as consultants in educational business management to these smaller school districts, without additional charge. The membership fee, commencing next year, is tentatively listed at $25 per district.

What are the goals of the headquarters office at the present time?

We are (1) emphasizing the establishment and raising of standards of school business management, (2) recommending and sponsoring research, (3) stressing the importance of state and regional associations, and (4) specifically working on ways and means to increase the competency of the individual member. The theme of the A.S.B.O. headquarters office at this moment is "practical service to the membership."



amazing

- *long lasting*
- *non-flammable* **super HIL-SWEEP**

makes dirt and dust disappear!

Magnetically *attracts* dirt and dust, holds it to the mop. No kick-up of dust, to re-settle later. Super HIL-SWEEP is easy to use. Just spray or sprinkle it on mop the night before. Penetrates evenly into cotton wicks. Stays in the mop without build-up; just shake mop to release dust. Makes daily maintenance fast, simple, effective.

- **Saves Frequent Scrubbings**
  Super HIL-SWEEP picks up the dirt before it has a chance to grind in. Leaves the surface dust-free, with renewed lustre.
- **Formulated for Asphalt Tile—**
  Safe for any surface.
- **Fire-Safe, Too**
  Will not freeze—yet has no flash point. No fire hazard in use. No spontaneous combustion of mop or dressing in storage.
- **Keeps Your Floor Slip-Safe**
  Keeps a safe floor safe—does not affect the non-slip properties of your floor.
- **Long-Lasting**
  Super HIL-SWEEP evaporates very slowly; stays in the mop. Sweeps entire area without re-treating mop.



Make This Test Yourself—24-hour dunking in 100% Super HIL-SWEEP does not injure Asphalt Tile!



The Hillyard Maintaineer® is "On Your Staff, Not Your Payroll". Ask him for expert advice on your floor problems. Serves you from Hillyard Branch Offices in Principal Cities.

ST. JOSEPH, MISSOURI
Passaic, N. J.
San Jose Calif.

Branches in Principal Cities

FIND OUT HOW ECONOMICAL Super HIL-SWEEP CAN BE. WRITE TODAY

HILLYARD, St. Joseph, Mo.

Without obligation, please have the Hillyard Maintaineer nearest me show how New Super HIL-SWEEP will save my floors and save me money.

Name.....

Institution.....

Address.....

City.....State.....

A Tale of Five Cities

as told by their superintendent of schools

Book Review by WILLIAM J. SANDERS
Superintendent of Schools, Springfield, Mass.

SCHOOL SUPERINTENDENT IN ACTION IN FIVE CITIES. *By Frank E. Spaulding, former superintendent of schools in Ware and Newton, Mass., in Passaic, N.J., in Minneapolis and Cleveland. Topside and West Rindge, N. H.: Richard R. Smith Publisher, Inc.* 1955. *Pp.* 699. $6.50.

ON APRIL 17, 1895, the school committee of Ware, a flourishing but small textile manufacturing town in western Massachusetts, reluctantly elected its first superintendent of schools. The committee regarded a superintendent as a threat to its prestige and to the economy of the town and neglected to act until the issue was forced, with typical New England obstinancy, in town meeting. Although he had no experience, Frank Spaulding was selected from a fair field of experienced candidates because the committee learned he had been offered a $2000 job at a western college but would come to Ware for $1800. This bargain could not be turned down. Although he was fired two years later because he supported a high school principal in his criticism of an incompetent, but genteel, teacher, near neighbor to the school committee chairman, he *was* a bargain!

A New Hampshire Yankee, graduate of near-by Amherst College, student at the Sorbonne and the University of Berlin, and with a Ph.D. from the University of Leipzig, 28 year old Frank Spaulding came from a fellowship at Clark University strongly recommended by President G. Stanley Hall. He knew nothing of school administration, but he was filled with the heady spirit of the time—the experimental psychology of Leipzig, German philosophy and enthusiasm for universal education, and the Clark University approach to child study.

In numerous and well attended teachers meetings ("in the absence of movies, theaters, radios, television sets, and automobiles" these meetings were regarded as "social diversions"), he taught teachers to study every individual child. He closed the district schools; he wrote, singlehanded, a course of study for the elementary schools; he put 11 new subjects, including bookkeeping, into the high school and taught the principal how to schedule them; he bought new textbooks, and he increased the cost of education by 25 per cent during his first year!

Passaic, N.J., in 1897 was three times the size of Ware, with a population of 25,000. Dr. Spaulding immediately assumed leadership from the board of education by making all recommendations. He took over the appointment and advancement of teachers, initiated an inservice training program through a proliferation of teachers meetings, published an educational quarterly, and developed a new system of reading that resulted in the Aldine Readers. He began special classes, summer sessions, and evening schools, and in a series of monographs enlisted support for the increased cost of schools and for the reorganized program that kept children, most of them with foreign-born parents, in school longer.

"ABSOLUTELY FEARLESS"

When in 1902 the board offered him a two-year contract instead of an increase from $3000 to $4000 (the salary of the superintendent of Baltimore at that time!), he left for Newton for the desired salary. Newton was reputed to be a "burial ground for superintendents," but, as a Passaic board member said, Dr. Spaulding was "absolutely fearless."

Ten years later when Spaulding left Newton for Minneapolis, amid much praise and many expressions of regret, one editor struck an amusing off-beat note in his comment:



Because PLAYTIME engineered athletic field seating stresses superior design . . . structural safety . . . durability and long-life through **HOT-DIP Galvanizing** (after fabrication)—it's the logical choice of athletic officials and school administrators who consider QUALITY in a product equally as important as the price.



"FOR YOUR GAME SEATING COMFORT"
Playtime
EQUIPMENT CORP., MARS, PA.

Get the facts on PLAYTIME seating today. Send for FREE descriptive literature and investment analysis information.

Since the introduction of the Benjamin Porcenell Surface, it has become evident that here is a new concept in modern chalkboards. Teachers, principals, custodians, purchasing agents and architects alike want to know the full story behind the Better Visibility, Greater Damage Resistance and many other advancements in better seeing and instruction made possible by Porcenell. This new brochure is published to answer that demand.

Now, read the story behind...

NEW BENJAMIN PORCENELL CHALKBOARDS!

this **FREE Brochure** brings you the FACTS (including laboratory test data) every architect and educator should know about this newest advancement for Better Visual Education.

Send Coupon Today!

Send now for your free copy of this revealing 8-page brochure—all about the lifetime chalkboard, Porcenell. Go behind the scenes to see how Porcenell was developed, after 15 years and ¾ million dollars of research.* Watch the exacting manufacturing methods and latest processes that give Porcenell chalkboards a new high in visibility. Read and see why this remarkable surface has many times the damage resistance of ordinary boards. Study the many ways in which Porcenell makes possible better, more modern learning. See how Porcenell licks the high cost of installation. It's all here—in eight fact-packed pages that will make fascinating reading to everyone who is interested in the Visual Welfare of Young America!

*Porcenell is a patented, vitreous process developed by Vitreco, Inc., a research organization jointly owned by Youngstown Sheet and Tube Co. and Poor and Co.



Benjamin Electric Mfg. Co., Dept. NS
Des Plaines, Illinois

Please send me a copy of your new brochure "Porcenell Chalkboards . . . for the Visual Welfare of Young America". I understand there is no cost or obligation.

NAME _____

ADDRESS _____

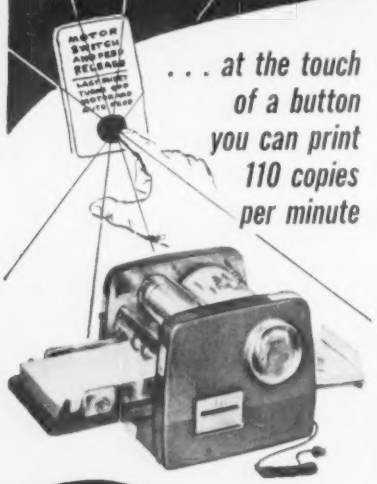
CITY _____ ZONE _____ STATE _____

Copyright 1955 Benjamin Electric Mfg. Co.

Distributed by: Educational Equipment, Inc., 2623 Woodhill Road, Cleveland 4, Ohio and Beckley-Cardy Co., 1900 N. Narragansett, Chicago 39, Ill.

AUTOMATION IN DUPLICATING IS HERE!

. . . at the touch of a button you can print 110 copies per minute



Heyer AUTOMATIC ELECTRIC SPIRIT DUPLICATOR

The Heyer Conqueror prints in 1 to 5 colors at a fraction of a cent per copy . . . without effort. Price lists, Bulletins, Forms, Menus—in fact anything typed, written or drawn on the master . . . from post-card to 9 x 14 in. sheets . . . simply pour out of this new duplicator. A touch of the button starts the motor and feed . . . and when the last sheet is fed it turns off automatically. Quickly multiplies your thoughts and efforts a hundredfold at very low cost. It "Always Makes a Good Impression"

FREE BOOKLET TELLS HOW AND WHY



Mail Coupon Today!

THE Heyer CORPORATION
1862 S. Kostner Ave. • Chicago 23, Ill.

Please send free booklet and details on Automation in Duplicating.

Name_____

Company_____

Address_____

City_____ State_____

"It is presumed that Dr. Spaulding, in making the Newton school system the most expensive in the country, had achieved the pinnacle of his ambition, and is now seeking more lucrative worlds to conquer."

Although Minneapolis and Cleveland were enormous challenges to Dr. Spaulding, and the school systems in both cities witnessed many innovations and outstanding progress under his brilliant and energetic leadership, it would appear, really, that Newton was the pinnacle of his career as a superintendent. His 10 years of breaking through the New England conservatism of this beautiful but educationally reactionary suburb of Boston are those he dwells on most fondly and at greatest length. These were years replete with professional satisfaction when he could still spend most of his days in the classroom. They were also years sparkling with political excitement as he brought himself to terms of personal intimacy with the "powers" of the town.

He lost no time in taking charge. By preparing the first budget himself, he immediately wrested the initiative from the school committee and kept it. The standing subcommittees withered on the vine, and, before long, the committee of 14 was reduced in size by half. In this suburb of prosperous families whose sole concern with secondary education was as a preparation for college, he built a technical high school that soon enrolled more students than the high school. He started a program of industrial (vocational) education and liberalized the grammar schools, the only purpose of which previously had been to prepare for high school.

CONTINUOUS SURVEY

Dr. Spaulding surveyed the school system continuously, and the results of his ongoing survey were published in his annual reports, long regarded by the profession as classics in educational administration. With admirable expository skill and unequivocal straightforwardness, he explained the needs of the schools, what had been done to meet them, and what he proposed should be done. Support for many innovations, including a merit salary schedule for teachers, was obtained through these reports.

When Dr. Spaulding left Minneapolis two and a half years after his election, he took time off for illness caused by overwork. When he left Cleveland after three years as superintendent, during one of which he was on leave for work with an educational commission for the American Expeditionary Force in France, he was "tired, desperately tired, more tired than I revealed to anyone, even more tired than I would admit to myself. For 25 years, I had been taxing to the full, often overtaxing myself with no sufficient periods of rest."

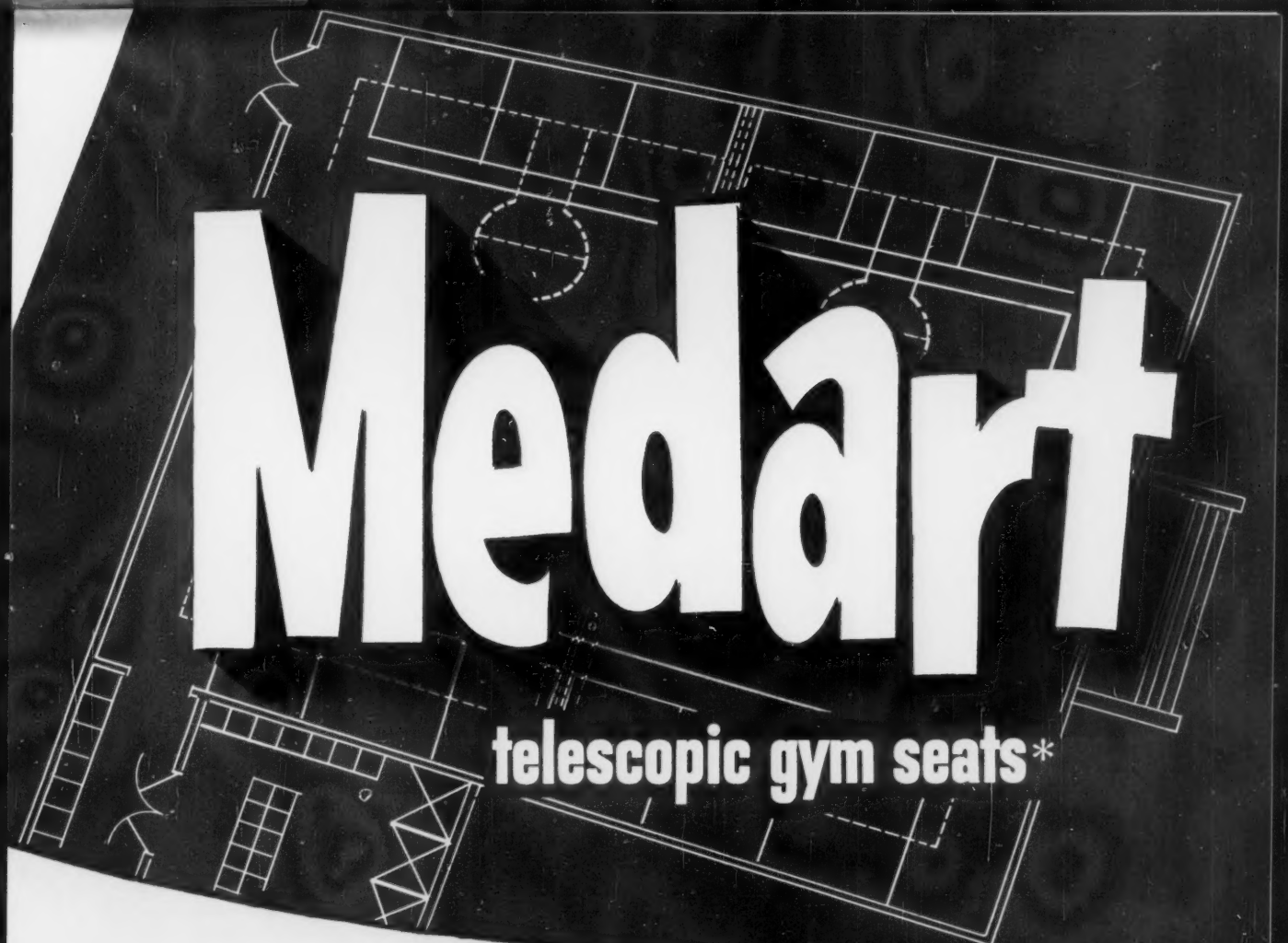
The professorship at Yale was a welcome relief.

Eagerly, he had taken the responsibility for each school system upon his own shoulders. He was energetic and courageous in the face of multiplying needs and mounting costs. He got support and moved forward on so many fronts at the same time that the opposition never caught its breath, never had time to organize effectively against him. A Newton editor called him "the smoothest politician Newton ever had in her midst." But he was truly an educational statesman who faced every problem with intelligence and the will to solve it. What the American school superintendency is today at its best is to no small extent what Frank E. Spaulding made it by precept and example.

OLYMPIAN EMINENCE

From his Olympian eminence of 89 years of age (on November 20) he looks back objectively upon his triumphs and mistakes; he gives as much space to his critics as to his admirers. One is tempted to say he looks back dispassionately, but that would not be entirely accurate. Perhaps "Olympian" is not the proper adjective either. There is nothing dispassionate in his account of how he "told off" the Detroit Board of Education that interviewed him for a superintendency he would not accept, and there is an un-Olympian glee in his story of how he maneuvered the Minneapolis board into appointing him to the superintendency for which, in their own collective minds, they had already rejected him. You can almost hear him chuckle as he recounts the advantage he took of the Cleveland board that, having elected him at $10,000 without his consent and faced with his possible refusal, in a panic set the salary at $12,000, $2000 above the New York salary. The members had no way of knowing that Minneapolis had just refused to raise his salary from $8000 and had offered him re-election by a bare 4 to 3 vote!

Ohio and Beckley-Cardy Co., 1900 N. Narragansett, Chicago 39, Ill.



Medart

telescopic gym seats*

better gymnasiums deserve better seating

MORE SAFETY—Four double *vertical* uprights per row put the spectator load directly on the floor, not the casters or walls.

MORE STRENGTH—Self-supporting, free-standing steel understructure does not depend on wood members for strength.

MORE ROOM—22″ or 24″ row depths, plus under-seat clearance provides more toe, heel and leg room.

MORE VISIBILITY—10½″ or 11½″ row rise makes seeing easier.

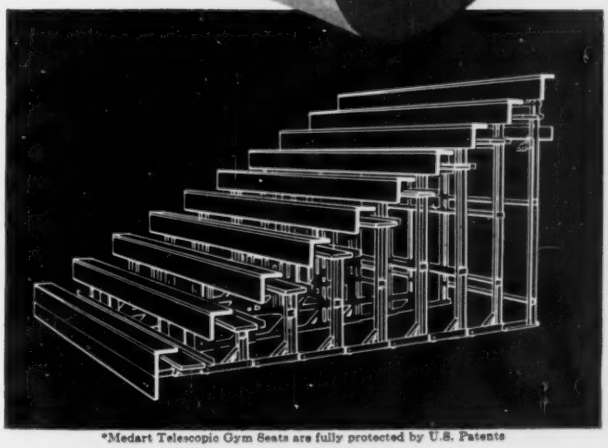
LESS EFFORT—Free-floating, interlocked roller housings and supports under seats make Medart Seats easiest of all to open and close.

Write for NEW catalog

SEE OUR CATALOG IN SWEET'S

SPECIFY the best, then INSIST on it!

FRED MEDART PRODUCTS CO., INC., 3532 DEKALB, ST. LOUIS 18, MO.



*Medart Telescopic Gym Seats are fully protected by U.S. Patents

A One-Volume Library of School Law

Book Review by LEE O. GARBER
Professor of Law, University of Pennsylvania

EDUCATION AND THE SUPREME COURT. *By Clark Spurlock, assistant director, Portland extension center, general extension division, Oregon State System of Higher Education, and associate professor of history. Urbana, Ill.: University of Illinois Press.* 1955. *Pp.* 252. $3.75.

WHAT is the nature of the controls which the federal judiciary exercises over education? This question has become of prime importance, as interest in federal aid has mounted. With the advent of the United States Supreme Court's decision relating to the segregation of pupils in public schools on the basis of race and color, this question has taken on even added significance.

In light of the importance of this issue, a new book by Clark Spurlock is particularly timely. In this book Dr. Spurlock attempts "to be readily useful to school administrators, school boards, teachers and publicists" (*p.* 5). He could not, within the covers of a single volume, treat all Supreme Court decisions that have had some effect on the administration of public education in a detailed manner. Consequently he limits his treatment to 45 opinions which he considers of major importance (*p.* 3). Thirty-seven he discusses in detail. Eight others he considered incidentally in connection with those of the 37 with which they are closely related.

While the selection of the cases to be treated was "no doubt an arbitrary one" (*p.* 3), the author appears to have considered, primarily, two types of decisions: those "in which: (1) a school or a school system has been involved in conflicts between state and federal power and function under our system of dual government, [or] (2) acts of schools or school officials have been brought into conflict with the rights of individuals" (*p.* 4). As a result, he included in his study "substantially all the cases relating to education and schools which pursuit of these matters through indexes and annotations of Supreme Court decisions reveal" (*p.* 4).

QUESTIONS INVOLVED

His organization is based upon the three main types of questions he found involved in the cases he selected: (1) questions of state and federal powers and functions, (2) questions touching on the bill of rights, and (3) questions on rights of persons raised under the Fourteenth (and Fifth) amendment. Under each question the author groups and analyzes significant decisions. The concluding chapter contains brief summaries—each in a sentence or two—of the meanings of the decisions analyzed. These summaries, organized "in terms of [the] effect [of the decisions] upon persons or agencies directly concerned in the schools" (*p.* 225), are presented under the following headings: (1) rights of parents and students, (2) rights of teachers, (3) rights of races in schools, (4) powers of school authorities, and (5) rights of nonpublic schools (*pp.* 225-35).

This book will prove of value to students of school law, primarily. To those who wish to consider and study the reasoning of the courts on individual questions, it will serve as a ready and valuable source of reference. Although it was intended to serve as a ready reference for administrators, teachers and board members, I fear that its organization and style may not prove attractive to the average reader in these categories. In the case of most of them, interested in the law itself rather than in the reasoning back of the law, their reading is, unfortunately, likely to be confined to the last chapter—"Summary and Conclusion."

While the organization of the book itself appears to be sound, the state-

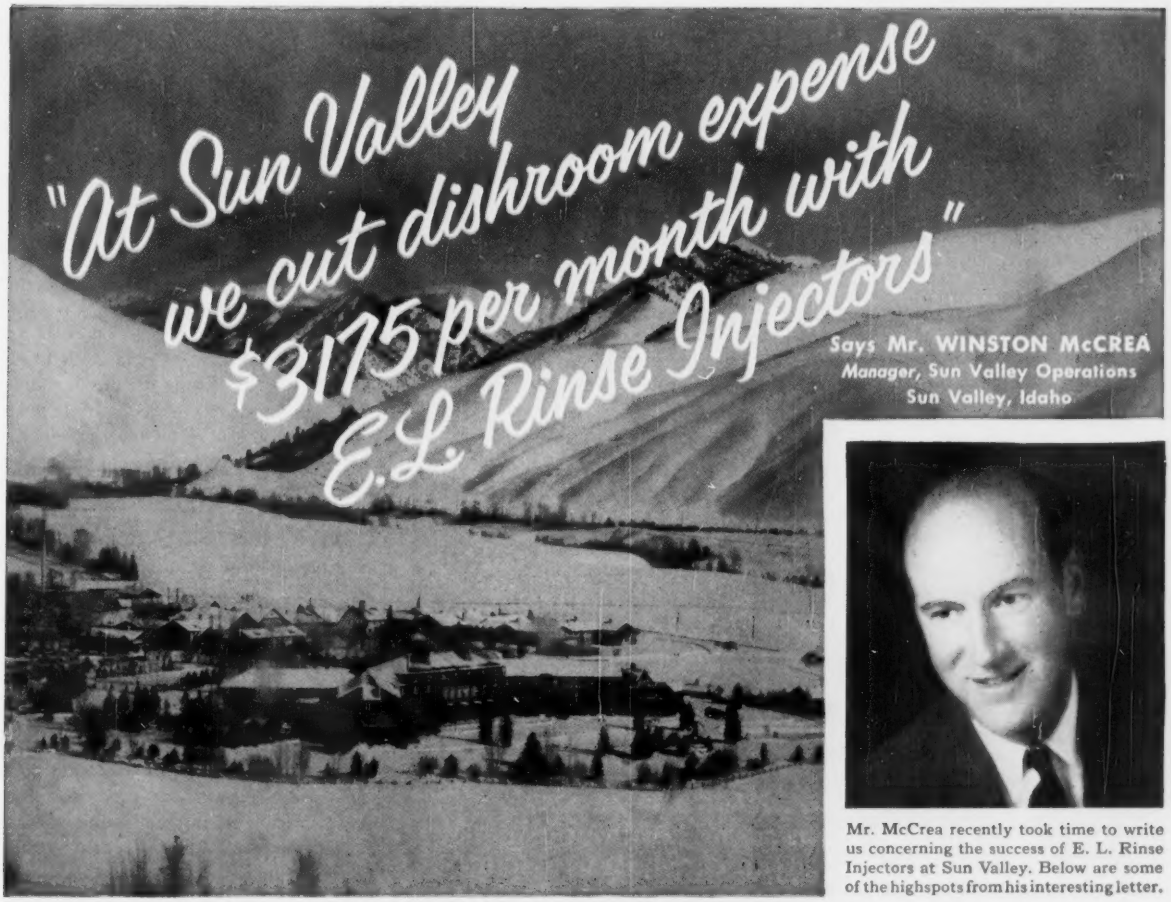
PAGE chain link FENCE
America's First Wire Fence—since 1883



• You need a fence if the children lack protection against common hazards. And you certainly want time-tested quality in the safeguard you provide. Whether you choose heavily galvanized Copper-Bearing Steel, corrosion-resisting Aluminum, or long-lasting Stainless Steel, PAGE Fence is quality controlled from raw metal to rugged fence erected on metal posts deep-set in concrete. Available are 8 basic styles, varied by heights, types and sizes of gates, and top rails. Finally, your PAGE Fence will be expertly erected by a reliable, technically trained firm permanently located in your vicinity. For important fence data and name of nearest PAGE firm—

Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Houston, Los Angeles, New York, Philadelphia or San Francisco.

PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.



Mr. McCrea recently took time to write us concerning the success of E. L. Rinse Injectors at Sun Valley. Below are some of the highspots from his interesting letter.

"Economics Laboratory Rinse Injectors have cut our toweling expense 65%," writes Mr. McCrea. "The number of towels used daily in the first quarter of 1954, as compared with the number used during the like period this year, shows a daily reduction of 3250 towels. This represents a monthly saving of $1950. And both the Challenger Inn and the Lodge note the complete absence of water spotting on glasses, china and silverware that were formerly dried by hand.

". . . at the Lodge and Challenger Inn, savings through increased efficiency total $1225 per month exclusive of towel savings.

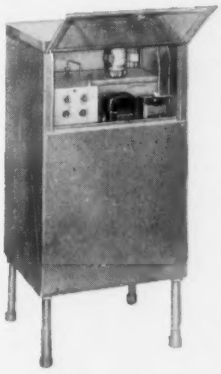
"We have realized all these savings despite the fact that we now serve about 20% more meals than we did before the Rinse Injectors were installed."

★

Get the whole story today from your SOILAX Sales Representative, or write direct.

YOU TOO CAN SAVE MONEY . . .

with the E. L. Rinse Injector in your dishroom. Use the same dishmachine for glasses, china, silverware, plastic. Forget about toweling, water spotting! End wet stacking. Get sparkling dry tableware right from the dishmachine . . . back to work in seconds. And remember: Only the Economics Laboratory Rinse Injector gives you **1. Constant-Feed Pump,** not a hit-or-miss gravity feed. **2. Automatic Electronic Brain,** eliminates costly solution waste. **3. Audible Refill Signal,** instantly warns when solution is low. **4. Lifetime Guarantee,** including installation, service, repairs FREE FOR LIFE as long as you use Rinse Dry exclusively in your Injector.



ECONOMICS LABORATORY, INC.

***General Offices:* Guardian Building, St. Paul, Minn.**

Executive Sales and Advertising Offices: 250 Park Avenue, New York 17, N. Y.

ment or description of organization is almost pedantic. One not primarily interested in school law will either not wade through the introduction and Chapter I, "Education in Our Dual System of Government," or, if he does, may give up without proceeding further.

In adapting this material from his doctoral dissertation, the author failed to popularize his treatment and simplify his style. While these weaknesses, if they may be called that, are confined largely to the introductory part of the book, they set the tone and are likely to alienate readers who, if they continued beyond this point, would find the book both interesting and profitable.

In his attempt to develop a ready reference for administrators, teachers and board members, Dr. Spurlock limited his selection of cases to those involving education, and he treated each separately. Perhaps this was desirable. Yet, from the reader's point of view, it has certain limitations. First, in limiting his choice to these cases, he was forced to omit some important ones that are valuable in developing the background necessary to understand some of the decisions he included.

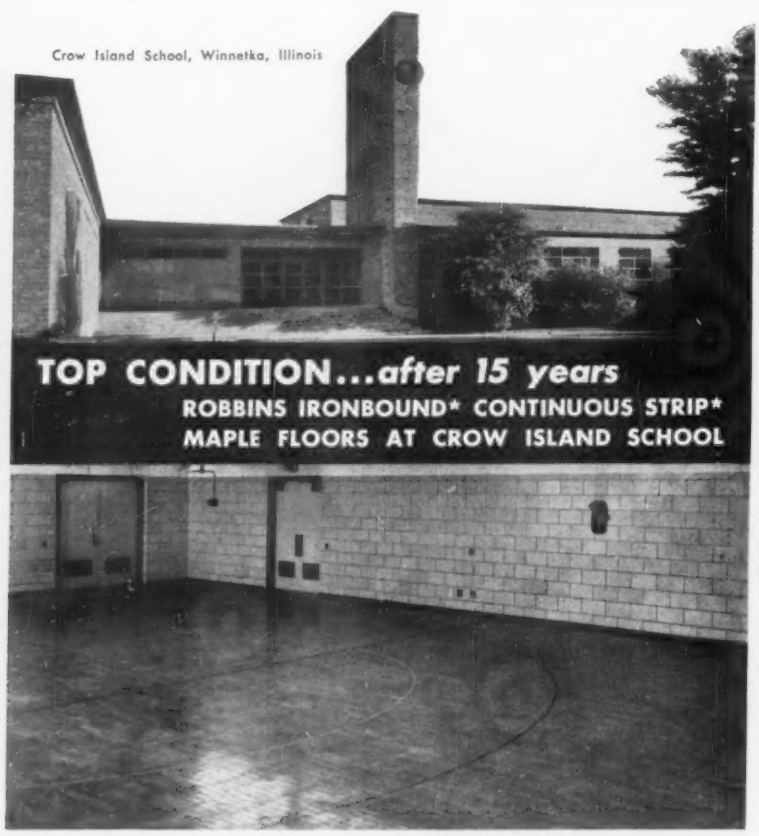
For example, in Helvering *v.* Davis, a case that was not concerned with education, the court upheld the Social Security Act and approved the use of money coming from taxation for purposes justified under the general welfare clause. This decision, which held that "Congress may spend money in aid of the 'general welfare'" within limitations that appear to be particularly broad, may be considered as blazing a new trail. Its implications for education are exceedingly important. They are, probably, far more significant than are those of many of the cases which Dr. Spurlock dealt with in detail.

Another example of a case that has important implications for education but that was not treated because of the method of selection is the famous Plessy case, which stands as a landmark in judicial history. Here, the court, by approving the separation of the races in the field of public transportation, laid down a principle that was immediately applied to education and that was accepted as precedent for cases arising in this field until it was overthrown in 1954. Without an understanding of this case, the real significance of later litigation involving the legal aspects of segregation in public schools may well be missed by the average reader.

It is only fair to point out, however, that, while this case was not treated in detail, it was mentioned editorially. Likewise, in defense of the author, it must be pointed out that he could not consider all cases that have a bearing upon education, and those he did select were significant.

REAL CONTRIBUTION

From what has just been said, it should not be inferred that this book lacks merit. Nothing could be further from the truth. In bringing together in one volume those decisions of the Supreme Court which deal with education and schools, the author has made a real contribution. He has fulfilled a long felt need that will be appreciated particularly by those not versed in the use of law libraries and those who have no access to such libraries. The persistent reader will find this book rewarding. It is recommended reading for all those interested in school administration, especially those interested in its legal aspects.



Robbins Ironbound Continuous Strip Maple Floor in gymnasium. Unretouched photo, taken August 1955.

Crow Island maintenance men say the Robbins floors stay in top condition . . . they're easy to clean, easy to maintain, and after 15 years, show little sign of wear.

From coast to coast, in classrooms, gymnasiums, school shops . . . wherever a floor must be able to "take it" and remain smoothly beautiful, you'll find Robbins Ironbound Continuous Strip Maple Floors. Robbins floors mean real long run economy because they're easy to care for and look like new after generations of hard use.

Write for the name of your nearest Robbins contractor-installer. He'll show you specifically how much you save with beautiful maple flooring.

Address inquiries to Robbins Flooring Company, Reed City, Michigan

MILLIONS WALK DAILY ON ROBBINS FLOORING

*T.M. Reg. U.S. Pat. Off.

ROBBINS FLOORING COMPANY

World's Largest Maple Flooring Manufacturer

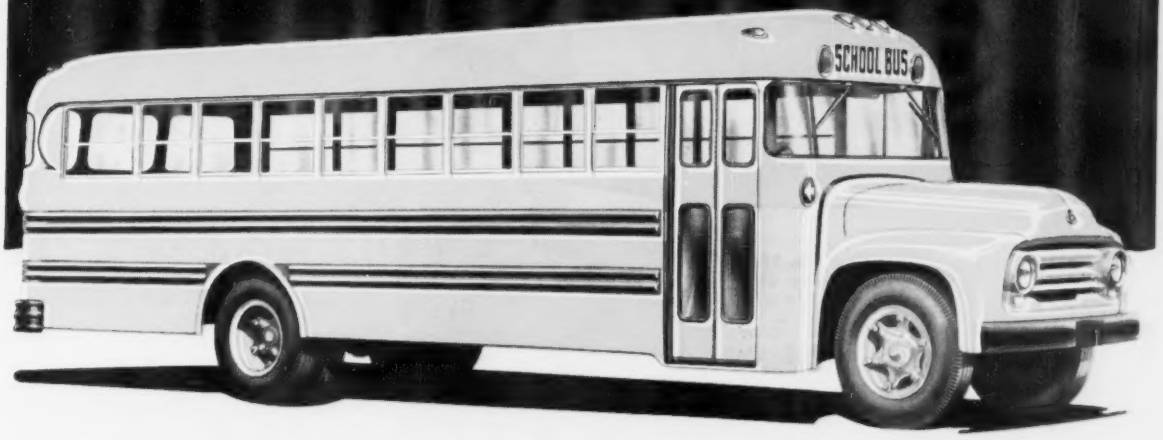
Reed City, Michigan • Ishpeming, Michigan

HIGH -WIDE *Handsome*

Increased headroom thru new design.

New curved windshield and more floor space.

New functional beauty inside and out.





Here it is! Streamlined to the Nth degree! New safety and operating features that SHOUT: SUPERB PERFORMANCE! UNHEARD OF ECONOMY! EXTRA SAFETY! COMPLETE SATISFACTION! Compare . . . you'll buy— **Oneida**

- √ NEW "Cradle of Steel!"
- √ NEW Full Headroom!
- √ NEW Bigger, wider, safer entrance door!
- √ NEW Solid steel one piece wheel housing!
- √ NEW Strength engineered into vital spots!
- √ NEW Emergency door with tamperproof lock!
- √ NEW Wrap around windshield!



NATIONWIDE SAFETY CONTEST

Enter Oneida's safe drivers contest. Win an Oneida School Bus for Your School System. Over 100 other awards. For details see school board . . . or write: **"SAFETY AWARDS," P.O. Box 186, Canastota, New York.**

Ask to See a "Sir Oscar" Demonstration.

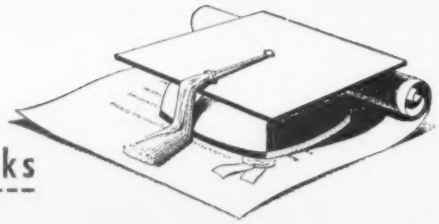
Send for new, free, colorful literature.

TRADE MARK Oneida

Watch for this long black line that sweeps into a curve at the end of a big yellow bus. It's the design that distinguishes Oneida as America's No. 1 Quality Safety School Bus.

ONEIDA PRODUCTS DIVISION
HENNEY MOTOR COMPANY, INC.
CANASTOTA, NEW YORK

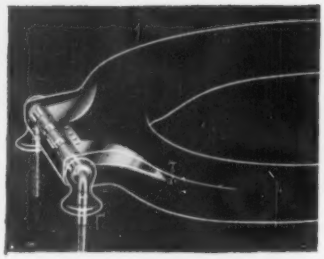
Graduate
of the school
of hard knocks





No. 2500
Church Hard Rubber Seat

Phantom view shows how heavy steel plate and brass bearing are molded integrally in the seat for unbreakable strength.



Now you can get toilet seats off your maintenance budget for good! Replace those old worn toilet seats with the Church No. 2500 Hard Rubber Seat — the seat that never needs replacing.

Built to stand hard knocks, this seat has a super-strength molded core, over which is vulcanized a thick, tough, lustrous surface of rubber composition with no joints, seams or crevices. Flat bottom, open front and cut-out back provide maximum sanitation.

Use coupon below for illustrated literature showing construction features and advantages of Church Seats for schools.

Church Seats
THE BEST SEAT IN THE HOUSE

C. F. CHURCH MFG. CO.
Division of AMERICAN-Standard
Holyoke, Massachusetts

C. F. CHURCH MFG. CO.
Dept. NS, Holyoke, Mass.

Please send me sample cross section and full information about Church Seats for schools.

Name .....

Address .....

City ..... *State* .....

Layman's Views Well Intentioned

"HOW to Get Better Schools"—267 pictureless pages—is a potpourri of good and not so good. The organization and authorship of the book are most perplexing because the reader cannot be sure who is speaking, or on what experience and authority the judgments are based.

The author is identified as David B. Dreiman, a newspaperman and magazine writer. The book comes from the presses of Harper and Brothers, also publishers of that unforgivable book by Rudolf Flesch, "Why Johnny Can't Read."

Both the foreword, by Roy E. Larsen, and the preface by the author identify the book as "essentially a story of the National Citizens Commission for the Public Schools, what it is, *why* it is, and what it has been about in the last half dozen years since its founding."

HOW TO GET BETTER SCHOOLS. *A Tested Program. By David B. Dreiman. New York: Harper and Brothers. Pp.* 267. $3.50.

The book tries to do too much. It *does* memorialize the National Citizens Commission for the Public Schools and was timed to do so as the organization ended its six and a half years as a commission and now continues as a "council."

With this purpose of the book we have no quarrel. It is appropriate that the achievements of the commission should be recorded by a friendly and capable professional writer.

Another purpose of the book is understandable in that it attempts to reorganize in brief form much of the how-to-do material that the commission has published. If one questions the merit of some of this how-to-do material, the differences of opinion probably should be argued with the commission and its staff, rather than with Author Dreiman.

In the field of his own specialization (publicity, newspapers and magazines) Mr. Dreiman is concise, practical and accurate. His chapter on "Working With the Press, Radio, and Television" takes on added value because of his own experience and training.

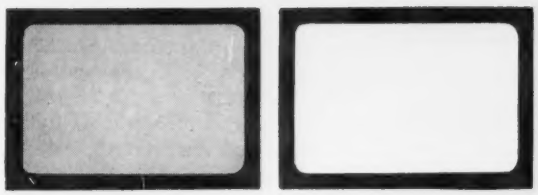
But when he dispatches in rapid sequence the involved problems of

WHY A-V DIRECTORS WANT THE NEW VICTOR 16mm SOUND PROJECTOR



TEACHER CONFIDENCE

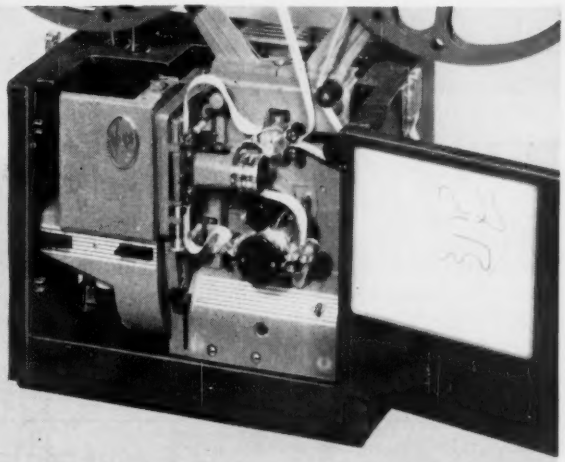
— inspired because teachers can operate the Victor "easy as 1-2-3" . . . can't thread it wrong . . . can't damage film!



38%

MORE LIGHT ON THE SCREEN

(with MARK II shutter)
— gives clearer, sharper pictures.



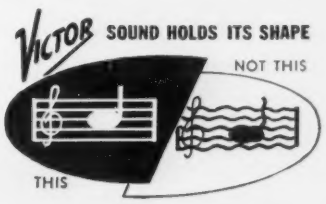
SAVES BUDGETS

Victor Safety Trips protect film from damage so you can buy *new* film instead of replacements. And, the Victor's engineered for rugged use, built to last a long, long time.

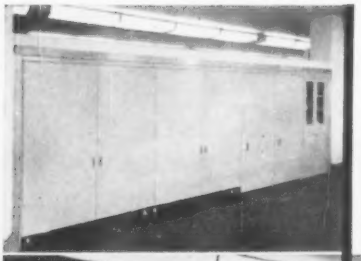
LET US PROVE THESE FACTS — *Write Today*

SEND FOR FREE FOLDER

VICTOR *Animatograph Corporation*
Dept. A-36, Davenport, Iowa, U. S. A.
New York — Chicago



Quality Motion Picture Equipment Since 1910



Designed to be
✓ BEAUTIFUL
Built to be
✓ PRACTICAL



R-W *In-a-Wall* Steel Wardrobes

TRADEMARK

Here, at last, is a radically new and different wardrobe designed to meet the ever-expanding requirements of today's elementary schools.

Space-saving Model 785 *In-a-Wall* Steel Wardrobes combine the convenience of quiet, individually operated flush doors—with the durability and functional beauty of all-steel construction. Each double-door section with roomy steel hat and coat rack accommodates up to 20 pupils.

Quickly installed, these easy-to-keep-clean *In-a-Wall* wardrobes may be combined with teachers' closets, supply closets or book cases. There's no wasted wall space. Cork bulletin boards, chalk boards and rails which may be attached to doors, come in various sizes and colors to compliment the mist green, desert sand or sea shell green finish of *In-a-Wall* units.

Your school can benefit too, with flexible, adjustable R-W *In-a-Wall* wardrobes. Write today for complete details. Installation is made by factory trained supervisors, and is fully guaranteed.

Only R-W In-a-Wall Steel Wardrobes give you all these advantages

- Effective ventilation
- Rigid steel construction
- Easy installation
- Quiet operation
- Full recess openings
- No obstructing hardware
- 6-way adjustment
- Perfect alignment
- Warp-proof

1880 1956

SLIDING DOOR HANGERS & TRACK · FIRE DOORS & FIXTURES · GARAGE DOORS & EQUIPMENT · DOOR OPERATORS · INDUSTRIAL CONVEYORS & CRANES · SCHOOL WARDROBES & PARTITIONS

Richards-Wilcox Mfg. Co.
SCHOOL EQUIPMENT DIVISION
Branches in Principal Cities

520 W. THIRD STREET, AURORA, ILLINOIS

school administration and professional ethics, we wonder whose ideas he is expressing. For example, his assertion on page 197 that "teachers generally oppose the principle of merit incentive pay while laymen favor it."

How does Mr. Dreiman know that this is true? He cites no evidence, offers no proof. If he is speaking for the Citizens Commission, we wish he would quote chapter and verse.

Another for instance: Chapter 6, "Conducting a Winning Campaign," espouses the philosophy that "the technics of a school campaign are those generally used in any election struggle, but refined to a special point." Heaven forbid!

Chapter 6 accurately describes all the tricks in the bag for a mass appeal grandiose campaign but fails to recognize that in some communities this is the way to *lose* an election. The fact that every school public relations project has to be tailor-made—geared to the mores and cultural patterns of a community—isn't even hinted.

And this brings us to our reservation and, at times, irritation, as we peruse the book. Again and again in its statement of problems that involve many professional considerations, we find a layman's opinion expressed as if it were a demonstrated fact or undisputed truth.

It is this kind of oversimplification and, at times, unintentional misrepresentation, that makes us skeptical of the last hundred pages of the book. We do not believe that Mr. Dreiman presumes to analyze all these problems of education on the basis of his own experience, since he is not introduced to his readers as either a teacher or a school administrator. Rather, he speaks from a career as the managing editor of a small town newspaper, as a writer on education and science for the *Minneapolis Star*, and as a former associate editor of *Life* magazine.

We assume, then, that the opinions expressed in his book with regard to any professional problems in teaching and school administration represent ideas conveyed to him by the staff of the Citizens Commission. That is why we ask: "Who's speaking? And for whom?" For, in our judgment, these personal points of view and debatable solutions should be identified with the laymen who express these judgments. The reader is entitled to know the source of these ideas so he can form his own judgments as to whether they are authoritative and valid.—A.H.R.



Bucket Brigade

If all the painters who have used Devoe Paints since 1754 were lined up, it would be the biggest parade in history!

We don't claim that 202 years in business are significant of anything except continued successful operation. But what does mean something is the "brigade" of many, many thousands of results-conscious painters and maintenance executives *today* who swear by the Devoe line.

That is the best proof that we have continued to supply these important customers with the kind of paints they can recommend, apply, and stand back of . . . year in and year out.

The investments Devoe is now making in new product and laboratory research would have been high finance in the old days of paint making. Today they are still "fancy figures," but more important, they are assurance that your confidence in Devoe will never be misplaced.

Such outstanding products as Devoe Vinyl Wonder-Tones, Devran (epoxy) finishes, the basically new Wonder-Pruf Masonry Finish (pat. pending) and the improved Wonder-matic Colors all illustrate the Devoe "firsts" that mean continued paint satisfaction.

DEVOE DEVOE PAINT

202 years of paint leadership!

Devoe & Raynolds Company, Inc.

Atlanta • Boston • Chicago • Cincinnati • Dallas • Denver • Los Angeles • Louisville • New York

wire from Washington

(*Continued From Page* 80)

Accrediting hits a snag

►The secretaries of the six regional accrediting associations recently concluded that the preparation of teachers is so much like general liberal arts education they would like to accredit it themselves. No regional association now accredits recognized professional schools. Unless the secretaries regard education as an easy place to extend their authority, they must be inferring that professional education of teachers is not professional at all. The implication is that elementary and secondary teachers belong to something less than a recognized profession.

It remains to be seen whether these employes can sell their own regional accrediting associations the idea. A prominent member of one of their most influential governing boards has said he has never heard of the resolution of the secretaries and that he is personally opposed to such a policy. Teachers and administrators in elementary and secondary schools will agree with him. They have a large stake in determining whether they belong to a major profession and whether programs of teacher education beyond general education are to be regarded as professional. Authorities in teachers colleges and in universities with strong professional colleges of education will also concur. So will many in liberal arts colleges.

Meeting in St. Louis with the Association of American Colleges in January, the regional association secretaries apparently exercised some influence in the 92 to 75 vote by which the A.A.C. turned down an invitation to join the National Council for Accreditation of Teacher Education. The N.C.A.T.E. proposed to change its size from 21 to 17 members by reducing the number of members allotted to the local and state legal agencies for education and then to add the Association of American Colleges to the council as a constituent body with two members of its own. This would have left eight institutional members in a council of 19, including administrators from four liberal arts colleges. The current chairman of the N.C.A.T.E. is President Charles J. Turck of Macalester College in St. Paul, which is a liberal arts institution.

The present constituent bodies of the N.C.A.T.E. are the American Association of Colleges for Teacher Education (six members), the National Education Association (six members), the Council of Chief State School Officers (three members), the National Association of State Directors of Teacher Education and Certification (three members), and the National School Boards Association (three members).

The contention of the regional association secretaries is that only the institutions should be involved in their own accreditation and that the state and local legal agencies and the education profession in general should have no part in it. This was the situation before the N.C.A.T.E. assumed the national professional accrediting functions for teacher education on July 1, 1954. Since cooperation of liberal arts colleges with the N.C.A.T.E. is perhaps better than it has ever been with any national professional accrediting association in the field of teacher education, it is difficult to believe that

School system cuts towel costs 29% with Mosinee Turn-Towls



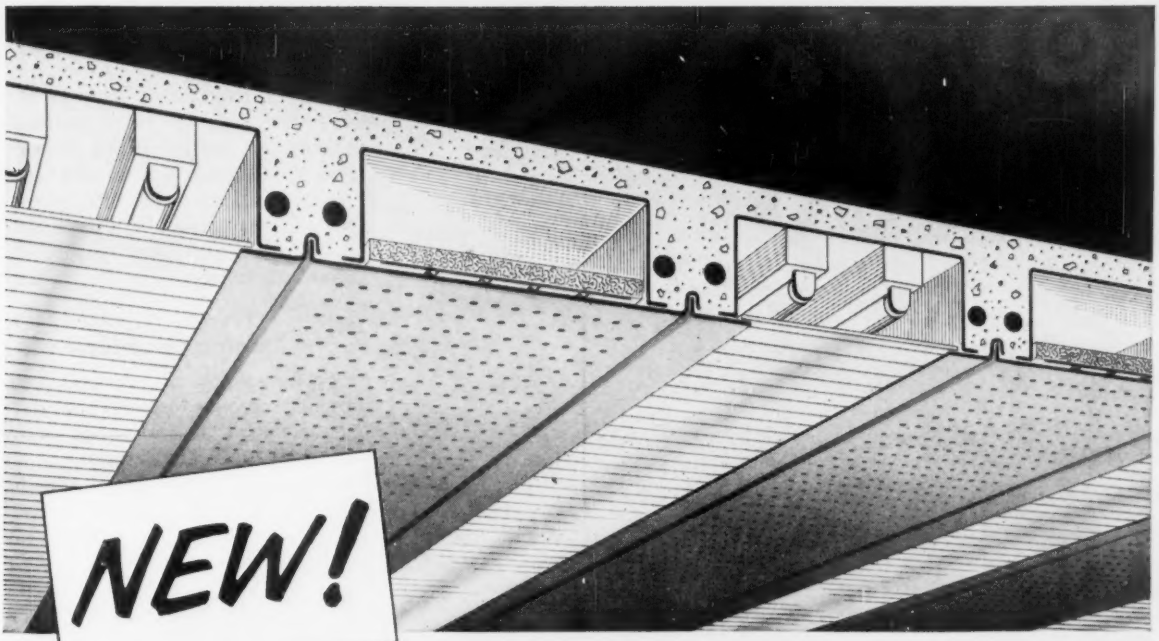
A school system in Michigan* with an enrollment of 1200 switched to Turn-Towls after using a towel of ordinary quality.

The cost of service per school year with the previous towel service was $616. Combining Turn-Towl drying qualities and the controlled dispensing feature of the Turn-Towl cabinet reduced the annual cost of the service to $436.

Improve your washroom facilities — and save money, too — with Mosinee Turn-Towl service. Write today for the name of your nearest Mosinee Towel Distributor.

*Name on request

MOSINEE
Sulphate Towels
BAY WEST PAPER CO.
1102 West Mason Street
GREEN BAY • WISCONSIN
Division of Mosinee Paper Mills Co.



FENESTRA TROFFER-ACOUSTICAL PANEL SYSTEM CUTS COST OF REINFORCED CONCRETE SCHOOL CONSTRUCTION

Multi-purpose Steel Panels provide long-span forms for concrete joists *plus* acoustical ceilings and recessed lighting troffers *built right in!*

Multi-purpose is the key to economy in school construction. The NEW Fenestra* Troffer-Acoustical Panels (TAC Panels, for short) are designed for multi-purpose use of materials and construction labor. They permit you to have acoustical treatment and lighting—features that usually require extra time and labor—*built right in the structure itself!*

Money is saved because 3 expensive building materials are wrapped up in these economical building panels: (1) the forms for concrete joist construction, (2) metal pan acoustical ceilings, and (3) recessed lighting troffers.

Time is saved because the structural floor for the rooms above and the acoustical ceiling and lighting system for the rooms below are completed at the same time . . . with only paint, finished flooring and installation of fluorescent fixtures to be done after the concrete has cured.

And, this new building system gives you better-looking, better-lighted classrooms that are easier to maintain, year after year. The ceilings can be washed or repainted as often as needed, without affecting the acoustical treatment. There is no hanging ceiling or "stuck on" acoustical material to be damaged or replaced.

Investigate the NEW Fenestra TAC Panel System now. Even if you have plans on the drawing board, they may easily be adapted to use it.

Call your local Fenestra representative or write today for your copy of the new brochure, *Fenestra TAC Panel System.* Detroit Steel Products Co., Dept. NS-3, 3405 Griffin Street, Detroit 11, Michigan.

*Trademark

Fenestra

Architectural, Residential and Industrial Windows, Metal Building Panels · Electrifloor†, Roof Deck · Hollow Metal Swing and Slide Doors †*

TAC

TROFFER-ACOUSTICAL BUILDING PANELS

Patents applied for

Another Modern Installation

by TOLEDO®





IN the modern Headquarters Building of The Port of New York Authority, New York City, a new Toledo Conveyor Dishwasher with conveyor Pre-Wash installed in the restaurant for employees provides fast, efficient, labor-saving dishwashing!

This Toledo 3T-100R, one of a wide selection of models, provides the extra economy of re-using the hot water of the final rinse in the pre-wash section. Conveyor carries dishes through pre-wash, wash and rinse.

Check your needs! Send today for up-to-date catalog information on newest Toledos . . . dishwashers, peelers, disposers or food machines.

TOLEDO SCALE CO.

Kitchen Machine Division
245 Hollenbeck St., Rochester, N.Y.

SERVICE Factory-Trained 306 Cities

It pays . . . Go TOLEDO all the way!



DISPOSERS DISHWASHERS PEELERS SAWS SLICERS CHOPPERS STEAK MACHINES

an effective institutional accrediting agency is the real goal of the objectors to the N.C.A.T.E.

After all, reluctance of colleges to give serious attention to preparation of elementary teachers forced Horace Mann to establish special teachers colleges. The events of 1956 prove that remnants of such reluctance are still with us, even though numerous liberal arts colleges have long since outgrown it.

Public opinion on federal aid

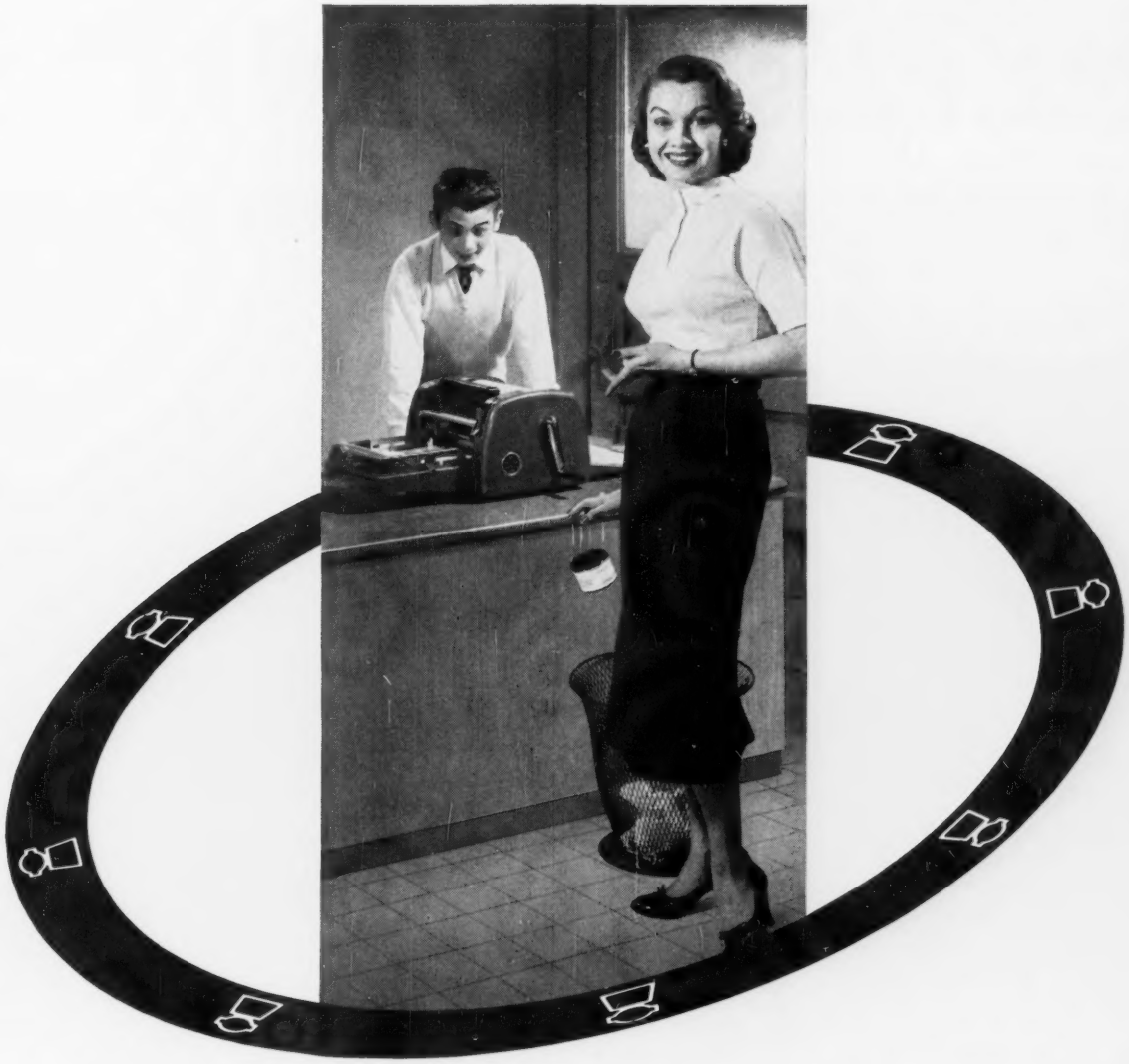
► Public opinion on federal sharing of public school construction costs has been expressed in many ways since the White House Conference.

The conference itself approved such federal assistance by a ratio of slightly more than 2 to 1, with the one-third of the participants who are professional educators apparently dividing in their opinions in about the same proportion as the two-thirds who are lay citizens.

Then the Gallup Poll made a nationwide survey and discovered that adults throughout the country are favorable by a ratio of 67 to 24 per cent, with 9 per cent expressing no opinion. This is a considerably larger margin than in the White House Conference. Since the poll was taken before President Eisenhower made his recent school construction plea to Congress, public approval may now be considerably higher. If Mr. Gallup is approximately correct, the White House Conference contained considerably more negative opinion than is to be found among citizens generally.

Unless both the Gallup Poll and the White House Conference are entirely incorrect, however, newspaper editorials do not represent public opinion on this issue. The School Public Relations Association, after eliminating those regarded as neutral, classified 271 recent editorials. It found 177 of these opposed to federal aid for school construction and 94 favorable.

Observers believe the majority of newspaper editors reflect the views of organized big business more than the views of the people. This is understandable, and is fundamentally in accord with economic self-interest. Relatively, state and local taxes hit small taxpayers much harder than federal taxes. Concentrations of wealth are taxed far more according to ability to pay by the federal tax system than by local and state systems that emphasize real property and sales levies.



The Day We Threw Away The Hand Cleaner

"It was the day we switched to the new Azograph process for making copies of lesson sheets, bulletins, announcements and many other things. You can write, type, draw and rule on Azograph masters—make changes and corrections—but there is no smudge, no smear, no stains . . . and no need for the hand cleaner. The copies are easy to read, too. They are produced in a short time and for little cost. That's why the principal, the students and I all give Azograph such a high mark."

For complete information about Azograph—the duplicating process with complete cleanliness—visit your A. B. Dick Company distributor. You will find his name listed under Duplicating Machines in the classified section of your phone book. Or mail the coupon below.

A·B·DICK
THE FIRST NAME IN DUPLICATING

A. B. DICK and AZOGRAPH are registered trademarks of A. B. Dick Company

A. B. DICK COMPANY NS-36
5700 Touhy Avenue, Chicago 31, Illinois

Please send me information about your patented Azograph duplicating process for schools.

Name_____ Position_____

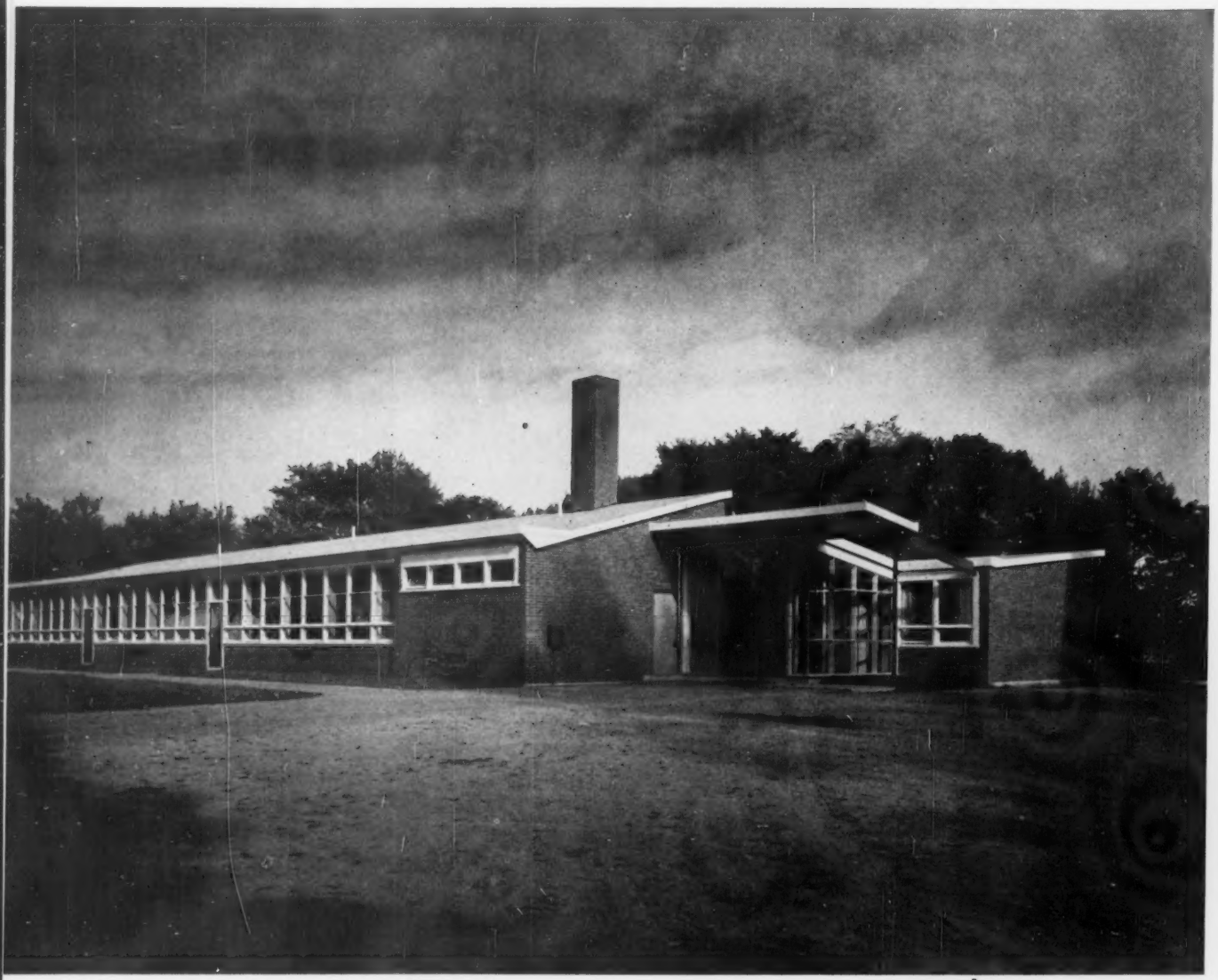
School_____

Address_____

City_____ State_____

Unique Maine school gets

More classroom comfort per



Washburn Elementary School, Auburn, Maine. Superintendent of Schools: Robert S. Ireland; Architects and Engineers: Alonzo Harriman, Inc.; Mechanical Contractor: L. W. Haskell Company.

DRAFT STOP

AAF herman nelson

UNIT VENTILATOR PRODUCTS

System of Classroom Cooling, Heating and Ventilating

BETTER AIR IS OUR BUSINESS



Illinois Steam Heating Specialties



Herman Nelson Console Heaters



Herman Nelson Portable Heaters



Herman Nelson Heating, Ventilating Units

dollar with DRAFT|STOP!*

Controls drafts without added heat load

AUBURN, Maine's Washburn Elementary School needed an addition. But the budget dictated: economical building cost, *low* operating cost. What's more, there could be absolutely no sacrifice in either teaching efficiency or student comfort. In short, Washburn officials demanded *more classroom comfort per dollar.*

One important economy was the use of end-on classrooms for space flexibility. This required positioning the unit ventilator at the end of the room, rather than the side, with air flow at right angles to exposed beams. A natural for DRAFT|STOP; because it distributes air so evenly, so comfortably—with *no* "dead spots", *no* "cold pockets".

DRAFT|STOP heats only when heat is necessary . . . *saves* fuel when it's not. It even controls downdrafts without using extra heat. Today, demand increases for *more classroom comfort per dollar.* That's why you see so many new DRAFT|STOP installations. Want more facts? For 16-page case study, write Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

**Patented (there are no substitutes!)*

Herman Nelson gives you more classroom comfort per dollar!

- *the first practical, high efficiency HOT WATER heating element for unit ventilators.*
- *DRAFT|STOP, the first unit ventilator to eliminate window downdrafts—without increasing heat load.*
- *LIGHT|STOP, the first accessory to adapt the unit ventilator to audio visual classrooms.*

Whenever more classroom comfort per dollar is offered, look for the name Herman Nelson





A deep, end-on classroom in the new Washburn Addition. Cost of this addition was lower by 97¢ per square foot than earlier addition with conventional side-on classrooms.

AMERICAN AIR FILTER COMPANY, INC.



Herman Nelson
Unit Blowers



Herman Nelson
Horizontal Unit Heaters



AAF ROTO-CLONES
For School Shops



Herman Nelson
Vertical Unit Heaters

Illinois Steam
Heating Specialties

Herman Nelson
Console Heaters

Herman Nelson
Portable Heaters

Herman Nelson
Heating, Ventilating Units

NEWS IN REVIEW

Proposes Industry Provide Reserve of Science Teachers

WASHINGTON, D.C.—Industry can help to solve the science teacher shortage, says David Sarnoff, board chairman of the Radio Corporation of America.

In an address at the annual dinner of the National Security Industrial Association, Mr. Sarnoff proposed the establishment of a "National Educational Reserve" made up of qualified teachers in mathematics, physics, chemistry, engineering and related subjects, to be drawn from industry.

"This reserve also could mobilize those who have reached the retirement age but whose knowledge and experience would make them inspiring teachers," he said. Qualified people willing to volunteer their services to teach in night schools without giving up their industry jobs also could be included in the educational reserve, he pointed out.

Mr. Sarnoff indicated that industry or government could take the initiative in working out the plan. However, he said, the plan would naturally be drawn up with the consent and cooperation of school authorities who would prescribe the courses and regulate instruction.

"In some degree, such a plan would amount to the restitution by business of personnel it has siphoned off from the school system," he said.

Mr. Sarnoff said his plan would be "strictly an interim one," for a period of perhaps five years, to meet the present emergency.

Enough Teachers in 1960's, N.E.A. Report Predicts

WASHINGTON, D.C.—The National Education Association has predicted an end to the teacher shortage—by the early 1960's.

If standards for the profession, including economic benefits, continue to improve, the association said, it expects some 30 per cent of 1962's graduating classes to become teachers—about 120,000 persons.

With yearly increases on this basis, the association said, there was fairly good evidence that there will be enough teachers to supply the minimum indispensable need in the 1960's. In its annual report to the teaching profession, the association also noted that the 1955 crop of teachers showed an increase of 1.5 per cent—the first increase in five years.

N.E.A. Legal Group Opposes Racial Amendment to Aid Bill

WASHINGTON, D.C.—The National Education Association has announced opposition to Rep. Adam C. Powell's proposed anti-segregation amendment to school construction bills.

Evelyn A. Casey, chairman of the association's legislative commission, pointed out that the amendment would permit those opposed to federal aid to mask their opposition by insisting on a civil rights amendment which would undoubtedly defeat the bill.

The legislative commission does not believe this amendment would contribute to an orderly solution to the problem of school integration, she added. She pointed out that the proposed amendment is contrary to the Supreme Court's decision which calls for gradual transition, under the jurisdiction of the courts.

Most Expensive Pupil

BLAIRSTOWN, N.J. — Seven year old Lennie Rue probably receives the most expensive first grade education in the country. Price: $2350 a year—about 10 times the national average cost. Lennie is the only pupil in Pahaquarry Township. Every morning he rides alone to Blairstown in a 16 passenger bus; every afternoon he returns home alone in the same bus.

Pahaquarry has no school, no post office, no railroad, and no pupils — except Lennie, whose father is ranger of the Pahaquarry Boy Scout Camp.

Here is the breakdown for the cost of Lennie's education: $55 for election of the five-man school board; $150 for salaries; $50 for auditing; $20 miscellaneous; $1800 for transportation; $250 for tuition paid to Blairstown, and $25 for insurance. The state pays $1054; 70 Pahaquarry taxpayers pay $1296.

School People Don't Know What News Is, Press Charges; Press Overemphasizes "Bad" News, Educators Complain

CAMBRIDGE, MASS.—Newspapermen and school administrators do not always agree on how school news should be handled. A recent study, covering 113 newspapers and 100 public school systems in New England, revealed some strong differences of opinion.

However, more than 90 per cent of each group said they were "fairly satisfied" with school-press relationships. The study was directed by Neal Gross, Harvard psychologist, for the New England School Development Council.

Both superintendents and newsmen said they faced a major problem: lack of time, staff and space to do a good job in their respective areas—informing the newspapers and covering the schools.

Nevertheless, more than one-third of the educators reported these gripes: The press overemphasizes "bad" or "sensational" news; reporters assigned to school news spend only a small amount of time on it. One-fourth of the schoolmen believed that the press does not work to make significant facts about education interesting.

More than one-third of the newsmen complained that school people are evasive in interviews and have no idea what news is. One-fourth said school press releases are poorly written. Some 22 per cent of the newsmen said they had serious difficulty in getting information from the schools.

Strongest areas of disagreement between schools and press involved the rights and duties of school personnel in dealing with the press. Eighty-five per cent of the newsmen, for example, agreed with the statement: "It is legitimate for a school board member to make statements without being specifically authorized to do so by the board." Only 13 per cent of the superintendents agreed.

(*Continued on Page* 148)

NEW... AUTHORITATIVE

"Trends in School Planning"



by The School Planning Laboratory Stanford University

120 PAGES OF CASE HISTORIES, PHOTOS, DRAWINGS

This newly published study by Stanford University's nationally recognized School Planning Laboratory presents a wealth of practical data in concise form.

Includes well-illustrated reports by educators, architects, administrators, and suppliers attending the Laboratory's 5th Annual School Planning Institute.
Covers specific school building programs, general trends, classroom planning, development of special facilities, use of new materials and building techniques.

ONLY $2.00 PER COPY. *Special offer. Reduced Price made possible by quantity printing.* **MAIL COUPON TODAY**

COLOR BALANCED Suntile

THE CAMBRIDGE TILE MFG. CO.
P. O. BOX 71
CINCINNATI 15, OHIO

Makers of *Suntile* —the ceramic tile that means more color, less upkeep, longer life for schools.

The Cambridge Tile Mfg. Co.
Dept. NS-36, P. O. Box 71
Cincinnati 15, Ohio

Please send me "Trends in School Planning." I enclose my check (or money order) in the amount of_____

Name_____

Address_____

City_____ Zone____ State_____

NEWS

Four Southern Governors Seek Action in Congress, State Legislatures Opposing Supreme Court Ruling

RICHMOND, VA.—Four southern governors have agreed to seek concerted action in their state legislatures and Congress to oppose the Supreme Court's ruling against segregation in public schools.

Announcement of the governors' decision was made after a six-hour conference here in which Governors Thomas B. Stanley of Virginia, Marvin Griffin of Georgia, George Bell Timmerman Jr. of South Carolina, and J. P. Coleman of Mississippi participated. Gov. Luther Hodges of North Carolina attended the meeting as an observer, because his legislature was not in session.

In an official statement summarizing the conference, the governors said that states had not delegated to the federal government or its agencies the right to prohibit segregation in the public schools and that they therefore would make the following recommendations to their respective legislatures:

"1. That there be adopted a resolution of interposition or protest . . . against the encroachment of the central government upon the sovereignty of the several states and their people.

"2. That a call be made upon the Congress of the United States to take such action within the limits of its constitutional authority as to protect the states and their people against . . . encroachment by the central government.

"3. That each state exercise its right to enact and utilize such other appropriate legal measures as it may deem advisable to protect its sovereignty and the rights of its people."

Earlier in the month, the Virginia legislature unanimously passed a bill setting March 5 as the date of a convention to amend the state constitution to provide state funds for the private education of school children. The senate voted to pass the bill without the usual committee consideration, printing and constitutional readings.

At the same time, in Georgia, Governor Griffin told a joint session of the state house and senate that Georgia would "never surrender in the fight to maintain racial segregation." He called for the passage of legislation to implement the "private school plan" ratified by Georgia voters in 1954 as a constitutional amendment. The amendment authorizes "education grants" to children in lieu of public education.

Groups Ordered Not to Interfere With Integrated Schools

HOXIE, ARK.—Federal Judge Albert L. Reeves has made permanent a temporary injunction ordering three pro-segregation organizations not to interfere with racially integrated schools here. Specifically, the pro-segregation leaders are prohibited from boycotting or picketing the schools, trespassing on school property, or threatening school administrators and board members with bodily harm.

Before the decision was announced, K. E. Vance, superintendent of schools at Hoxie, submitted his letter of resignation. In the letter, he cited the "ordeal" to which his family had been submitted since the issue arose in August and said that he must leave for the sake of his wife's health.

Negro Student Barred From U. of Alabama Because of Riots

TUSCALOOSA, ALA. — The first Negro student to enter the University of Alabama has been temporarily barred from classes by order of the university's board of trustees. The trustees' action followed several days of demonstrations by students and others; the trustees said they were acting "for the safety of other students and faculty members."

The student, Autherine Lucy, enrolled in the university under a federal court order on February 3. She was commuting from Birmingham 58 miles away, having been denied dormitory and dining hall privileges.

Miss Lucy asked the federal court in Birmingham to order the university to readmit her to the campus. The university announced that the original order opening the school to Negroes will be appealed to the Supreme Court.

Judge Threatens to Defy Directive on Segregation

CINCINNATI.—A federal district court judge has threatened to defy a directive from a U.S. court of appeals ordering him to act immediately to end alleged segregation in schools at Hillsboro, Ohio.

The directive reversed Judge John H. Druffel's ruling of Jan. 28, 1954, in which he refused to enjoin the Hillsboro Board of Education from setting up a zoning system which kept some Negro children out of a predominantly white school. Judge Druffel said it would take an order of the Supreme Court to make him change his mind unless the school board desires to accept the court of appeals order.

Arlington, Va., to Begin Desegregation Program Next Fall

ARLINGTON, VA.—The local school board here voted to begin a program of desegregation in the schools next fall. Arlington is the first Virginia community to take steps toward partial integration, it was reported.

The school board's policy called for elementary schools to be integrated next fall, junior high schools in the fall of 1957, and senior high schools the following year.

Supt. T. Edward Rutter recommended the program to his school board on the assumption that the Gray commission plan would be enacted into law, allowing those who wished to attend segregated schools.

Charges Virginia Governor Plays "Into Hands of Moscow"

NEW YORK.—Commenting on the Virginia referendum for interposition, a political leader has accused the governor of Virginia of playing "squarely into the hands of Moscow." George S. Counts, New York State chairman of the Liberal party, charged that Governor Stanley and his associates had "proved substantially correct" an editorial in *Izvestia,* Soviet newspaper, that had termed the Supreme Court decision a "demagogic gesture" designed for "export."

Virginia's action "is as damaging to the cause of liberty as the conspiratorial activities of all the Communists in the United States," said Dr. Counts.

Tennessee Governor Refuses to Call Session of Legislature

NASHVILLE, TENN.—Gov. Frank Clement has refused the request of a group of pro-segregationists to call a special legislative session for the purpose of blocking racial integration in the public schools.

A 15 member committee presented the governor with resolutions and petitions urging positive action to preserve

(*Continued on Page* 140)



New Du Pont Safety Floor Wax

with slip-retardant LUDOX

(colloidal silica)

gives superior slip resistance *plus* long-lasting beauty



The anti-slip protection of new Du Pont Safety Floor Wax brings a new measure of safety to floors in schools, plants, hospitals, stores, restaurants and other public buildings. And it gives this vital extra security *along with* full gloss, washability and extra-long life!

A premium slip-retardant wax, Du Pont Safety Floor Wax gives long-lasting beauty to linoleum, asphalt tile, rubber tile, vinyl tile and any other resilient floor covering. It is water-resistant—dries to a satin gloss in 20 minutes, then buffs to a high shine. Can be damp-mopped and buffed again and again with no loss in anti-slip protection. Available in 1-gallon, 5-gallon, 30-gallon, and 50-gallon containers.

You can get new Du Pont Safety Floor Wax through a Du Pont Floor Wax distributor in your area. For name of nearest source and information, write Du Pont Company, 7010-10 Du Pont Building, Wilmington 98, Delaware.

EVERY STEP is safer because Du Pont Safety Floor Wax is fortified with anti-slip "Ludox"—transparent particles of colloidal silica. Under pressure these tiny particles are pushed into softer wax globules. They absorb much of the foot's forward energy . . . give positive traction underfoot!

DU PONT

REG. U.S. PAT. OFF.

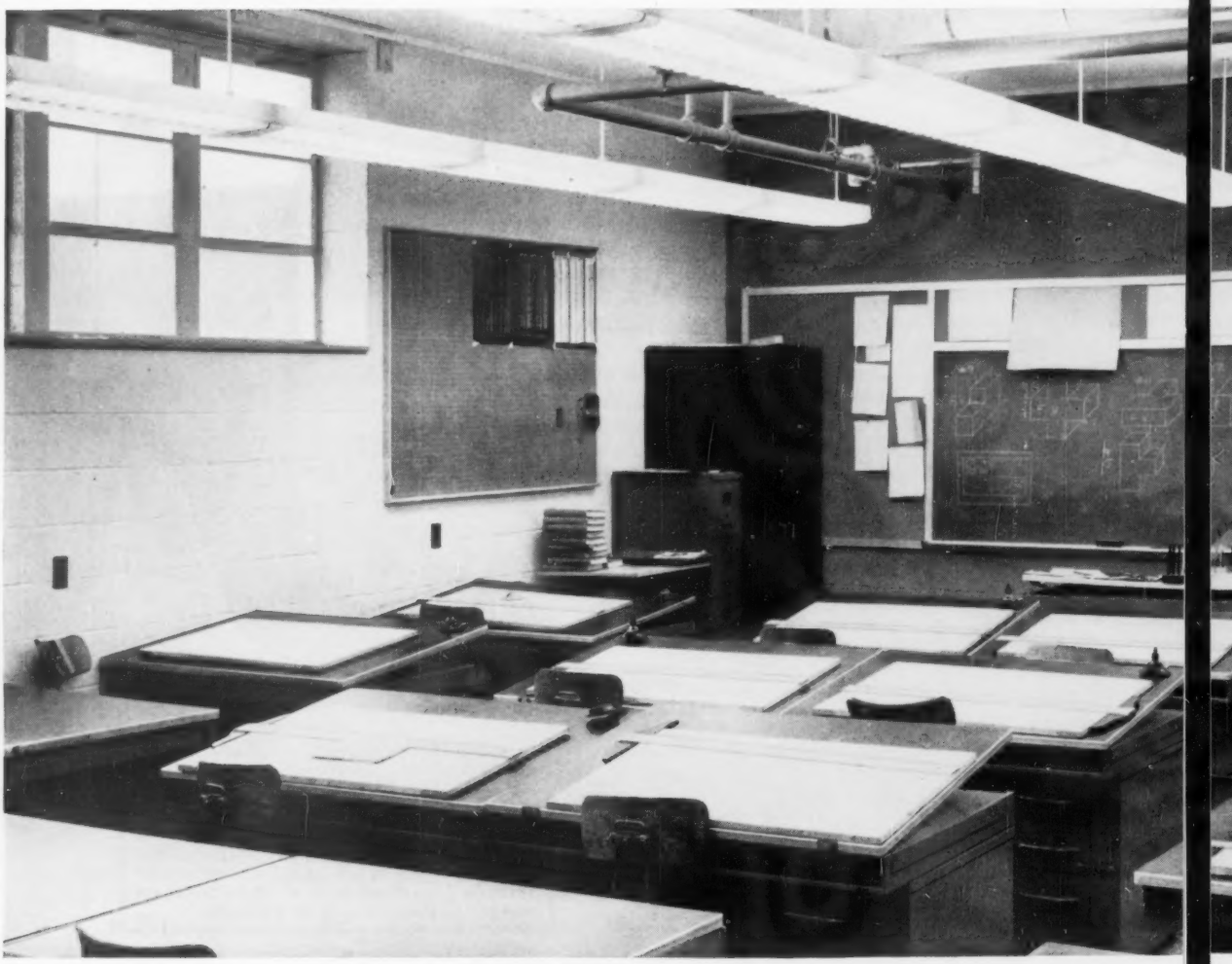
BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

NO DANCING DRAWING BOARDS . . . HERE!

No glare. No harsh contrast. No dancing drawing boards from eye fatigue. Westinghouse LC luminaires, mounted in continuous rows, provide students with uniform light that's easy on the eyes. And school officials report that these new LC's, with luminous wrap-around side panels, create an even flow of light from one end of the fixture to the other.

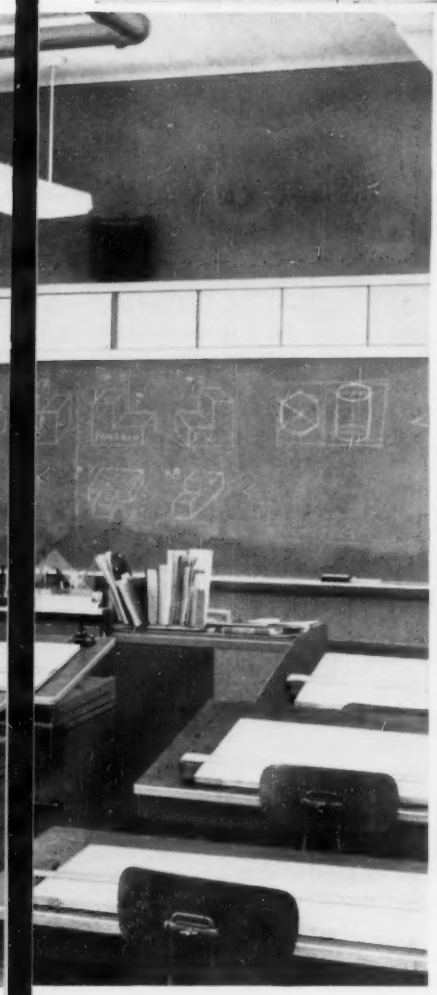
Westinghouse LC luminaires are really versatile. Their shallow design and smooth good looks are right at home in classrooms, mechanical drawing rooms, home economics rooms; in fact, wherever school activity demands comfortable seeing conditions. In addition, they can be relamped and cleaned with ease by simply swinging open hinged louvers.

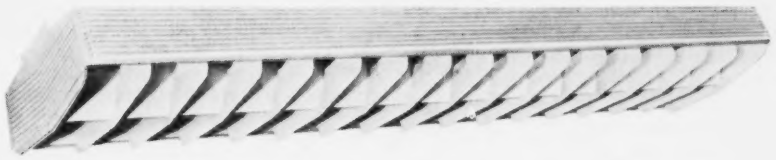
Planning a modernization or expansion program? Let Westinghouse, largest manufacturer of commercial, industrial, and flood lighting, suit your specific requirements. Ask your nearby Westinghouse distributor for more details. Or write Westinghouse Electric Corporation, Lighting Division, Edgewater Park, Cleveland, Ohio. J-04393





Franklin Township High School,
Newlonsburg, Pennsylvania.





Westinghouse LC luminaires come in a variety of styles to suit your requirements. Four-foot and eight-foot lengths, two-lamp and four-lamp widths with two types of shielding make the Westinghouse LC an extremely flexible unit. It provides direct-indirect light distribution when suspended, and direct distribution when surface-mounted. All metal surfaces are protected by Bonderite for corrosion resistance.

YOU CAN BE **SURE**... IF IT'S

Westinghouse

(*Continued From Page 136*)

segregated schools. But Governor Clement told the delegation: "I cannot please you today because I don't think the course of action you suggest is in the interest of Tennessee." He said his policy was to proceed calmly with a plan for gradual integration in the state colleges.

Segregation Briefs

WICHITA FALLS, TEX.—N.A.A.C.P. attorneys filed a suit seeking admission of Negroes to an elementary school. In Houston, which has the state's largest school district, it was announced that school staff meetings would be desegregated.

WEST VIRGINIA.—Mercer, Summers and Raleigh county school authorities quit short of a court battle and agreed to desegregate their schools. This left only six of the state's 55 counties which are not in the process of desegregation. The N.A.A.C.P. said court tests were planned in those six.

BIRMINGHAM, ALA.—The Birmingham teachers union has officially broken its ties with the national organization and the A.F.L.-C.I.O. The action was taken in protest against the American Federation of Teachers' policy of racially integrated local groups. The Birmingham Federation of Teachers said that compliance with the recently adopted policy on racial integration would be impossible. The majority of Birmingham teachers are not members of the union.

KENTUCKY.—In the state's first school desegregation suit a federal judge held that Adair County should open its high school to Negroes February 1, and that integregation in county elementary schools should be effected by August or September of this year.

BALTIMORE.—Two sets of Baltimore County white parents were hailed into juvenile court because they kept their children out of racially mixed public schools. One family moved to Florida rather than comply with the compulsory education laws of the state; the other family is facing a technical charge.

Teacher Beaten by Teen-Agers; Assailants Unknown to Him

CHICAGO.—In an incident of the "Blackboard Jungle" type, two boys attacked a teacher here, leaving him unconscious and with a head wound which required 14 stitches to close.

Reportedly, Anthony M. Grott, teacher at Schiller Elementary School, found the boys in the hall and asked them for passes. When they were unable to produce any passes, Mr. Grott said he planned to summon the principal and was then attacked by the boys.

Obie Randall and Winford Mine, both 17, were apprehended and confessed that they had beaten the teacher into unconsciousness.

Questioned after the incident, Mr. Grott showed no bitterness. He did not know his assailants, but he said, "I would just like to see those boys straightened out so they may make something out of their lives."

A Purple Heart veteran of World War II, Mr. Grott smiled tolerantly at the suggestion that the experience might leave him somewhat fearful of his classroom work. "Actually," he said, "I don't believe there are any 'Blackboard Jungle' type boys."

here's where troubles can begin

OR BE SOLVED



Classroom wardrobes are attractive, practical space savers—but when it comes to safety, easy operation and low maintenance, you can specify and insist on EMCO with confidence because of 3 EMCO EXCLUSIVE Advantages:

SINCE EMCO 1932 ® **classroom wardrobes**

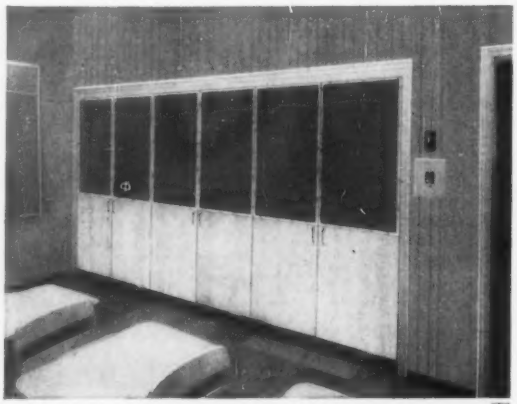
1 **EXCLUSIVE HARDWARE DESIGN** makes wardrobe completely safe. There are no obstructions in recess to trip over . . . no overhead weights to fall . . . fingers or arms cannot be mashed when opening doors.

2 **INSTALLATION IS MADE ONLY BY EMCO FACTORY-TRAINED EXPERTS** . . . and is included in the price. That's why only EMCO Wardrobes are . . .

3 **GUARANTEED FOR THE LIFE OF SCHOOL!**

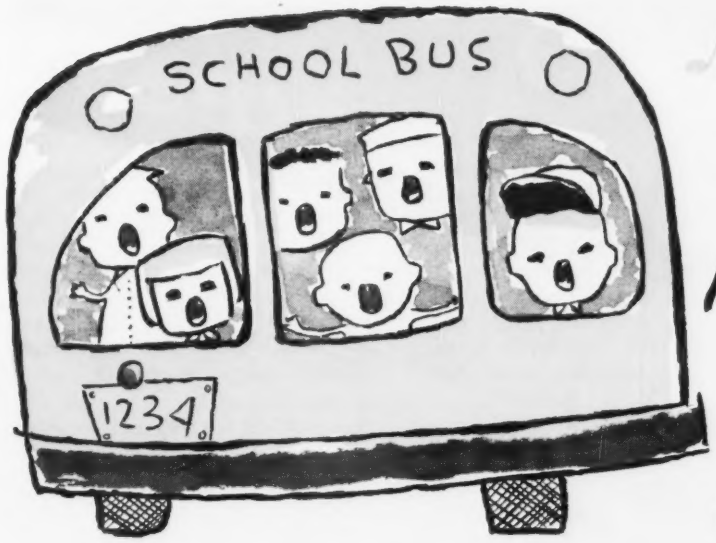
To Be Sure Of The Safest, Best Planned Wardrobe—**Specify and Insist On EMCO Classroom Wardrobes**

Write for Catalog And Name of Nearest Representative



EQUIPMENT Manufacturing Co., INC.

1400 Spruce St., Dept. NS, Kansas City, Mo.



IT'S A FOO-R-R-RD FOR SAFETY FIRST

1956 Ford School Bus safety chassis meets and often surpasses N.E.A. Safety Standards

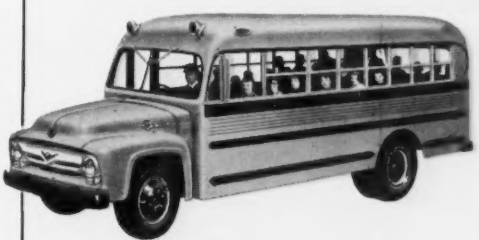
Ford meets these N.E.A. Safety Standards

- **Power-type brakes** shall be part of equipment for chassis designed for 48 passengers or more.
- **Brake vacuum reservoir** shall be at least 1000-cu. in. capacity for vacuum-actuated systems.
- **Front bumper** must be of sufficient strength to permit pushing vehicle of equal gross weight without permanent distortion.
- **Drive shaft** shall be protected by metal guard to prevent it from whipping through floor or dropping to ground if broken.
- **Fuel tank** shall have minimum capacity of 30 gallons and be made of 16-gauge terneplate or equivalent.
- **Flexible gasoline-** and oil-proof connections shall be provided at engine end of fuel line.
- **Rear springs** shall be of the progressive type.
- **Stationary eyes** of front springs shall be protected by wrapper leaf in addition to main leaf.
- **All tires** shall be of same size and ply rating.

Ford surpasses these N.E.A. Safety Standards

- **Front axle** shall have gross weight rating equal to or exceeding load supported by front axle.
- **Rear axle** shall be full-floating type and have a gross weight rating equal to or exceeding load supported by rear axle.
- **4-wheel brakes** adequate to control fully loaded bus shall be provided.
- **Brakes** shall be able to stop vehicle within 22 feet when driven at 20 m.p.h. over dry level road.
- **Grade ability** must be such that bus can climb 3% grade at least 20 m.p.h. (fully loaded).
- **Double-action** shock absorbers of adequate size shall be provided at front.
- **Springs** must have ample resiliency to sustain fully loaded bus without evidence of overload.
- **Steering gear** shall be designed to provide safe and accurate performance when vehicle is operated with maximum load and at maximum speed.

From the ground up—there's extra safety in every Ford School Bus Chassis for '56. See how Ford's school bus construction meets and often exceeds N.E.A. requirements . . . at left. For '56, Ford offers you 5 new Superior Short Stroke engines—from a 133-h.p. Six to the powerful 175-h.p. V-8; 4 wheelbase lengths with capacities up to 66 passengers. Lifeguard steering wheel helps protect driver from steering post, in case of accident; new blowout-resistant tubeless tires are standard. *For more information see your Ford Dealer today—or send in coupon below.*



FREE booklet

FORD Division of FORD MOTOR COMPANY
P. O. Box B-3, Dearborn, Michigan

Please send me your latest news on the New Ford School Bus Safety Chassis for '56

NAME_____

ADDRESS_____

CITY_____ STATE_____

Check here if student ☐

Day and Night, More Schools Rely On . . . . . .

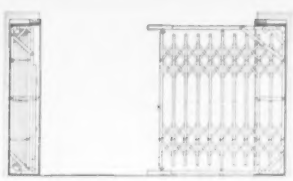
ACORN folding gates



to . . .

PROTECT school property and equipment from casual damage or acts of vandalism after school hours.

INSURE quick, easy control of after hours groups using gymnasium, auditorium or class rooms.



Illustrated above! Acorn "in-a-wall" folding gate unit. Diagram shows half of unit compactly folded into wall cabinet.

SCHOOLS WORK OVERTIME TOO! More and more communities are now enjoying the facilities that schools offer for class instruction, sports events, lectures and public meetings. All after scheduled school hours! During such times, Acorn "in-a-wall" Folding Gates act as a school guardian. Quiet, impersonal, architecturally correct, they keep the evening crowds neatly channeled into the auditorium or gymnasium, and away from unused classrooms. The evening over—the gates are folded into small flush cabinets. No fuss, no bother, just complete, dignified security. Ideal for new or old school, there is a gate to meet any requirement. Full specifications available in Sweet's Architectural File, or simply write for the new Acorn catalog today.

Acorn Wire and Iron Works

4940 South Kilbourn Avenue, Chicago 32, Illinois

NEWS

New York's Heald Commission Asks Increase in State Aid, Fewer School Districts; Sets Minimum Teacher Salary

ALBANY, N.Y.—Sweeping revision of state aid to education in New York has been proposed to the legislature here by the Heald Commission. The commission, formally known as the Temporary State Commission on Educational Finances, was appointed by the legislature in 1954 to study state financing in local school districts.

Basis of the new recommendations is a "foundation plan" which calls for an expenditure of $320 per "weighted pupil" in New York, as compared with the present figure of $233.

It is estimated that the new pupil expenditure, along with enlarged enrollments, would increase state aid to education by $60 million per year.

Under the commission proposals, the state support for this year would amount to some $760 million, or 83 per cent of the current operating budget for schools in the state.

The local share of the foundation program was established at $6.80 per thousand dollars of full valuation of taxable property in a particular district. State aid in excess of this amount would be given to each district to enable it to meet the minimum $320 per weighted pupil expenditure.

Each district is guaranteed a minimum of $125 per weighted pupil. The "weighted pupil" used in computing the program means that each half-day kindergarten pupil counts as one-half pupil, each child in Grades 1 to 6 counts as one pupil, and each child in Grades 7 to 12 counts as one and one-quarter pupil.

The commission, headed by Henry Townley Heald, chancellor of New York University, also made recommendations on teachers' salaries and school district reapportionment.

A minimum of $3500 was established for teachers' salaries, with an additional $300 being added for those holding master's degrees. The minimum becomes $4100 for teachers with five years' experience and $5100 for those with 10 years' experience.

To raise the quality of rural education, the commission asked that the number of school districts in the state be reduced from 1985 to 500. The commission also recommended that a present incentive plan for consolidated districts be continued. Under the plan, centralized districts may add a number of nonexistent pupils to their statistical computations for state aid.

Districts which must necessarily remain small because of the sparcity of school age population are also allowed "ghost pupils," to compensate for the higher cost of education for a small number of pupils. This allowance would also be continued.

The Heald program was criticized by the New York State Educational Conference Board as failing to meet the serious problems of the schools. Although commending a number of constructive features in the program, the board noted these omissions:

1. Lack of a long-range solution to the mounting costs of education.

2. Lack of any proposal for disentangling schools from city government in the state's six largest cities, which

(*Continued on Page* 144)



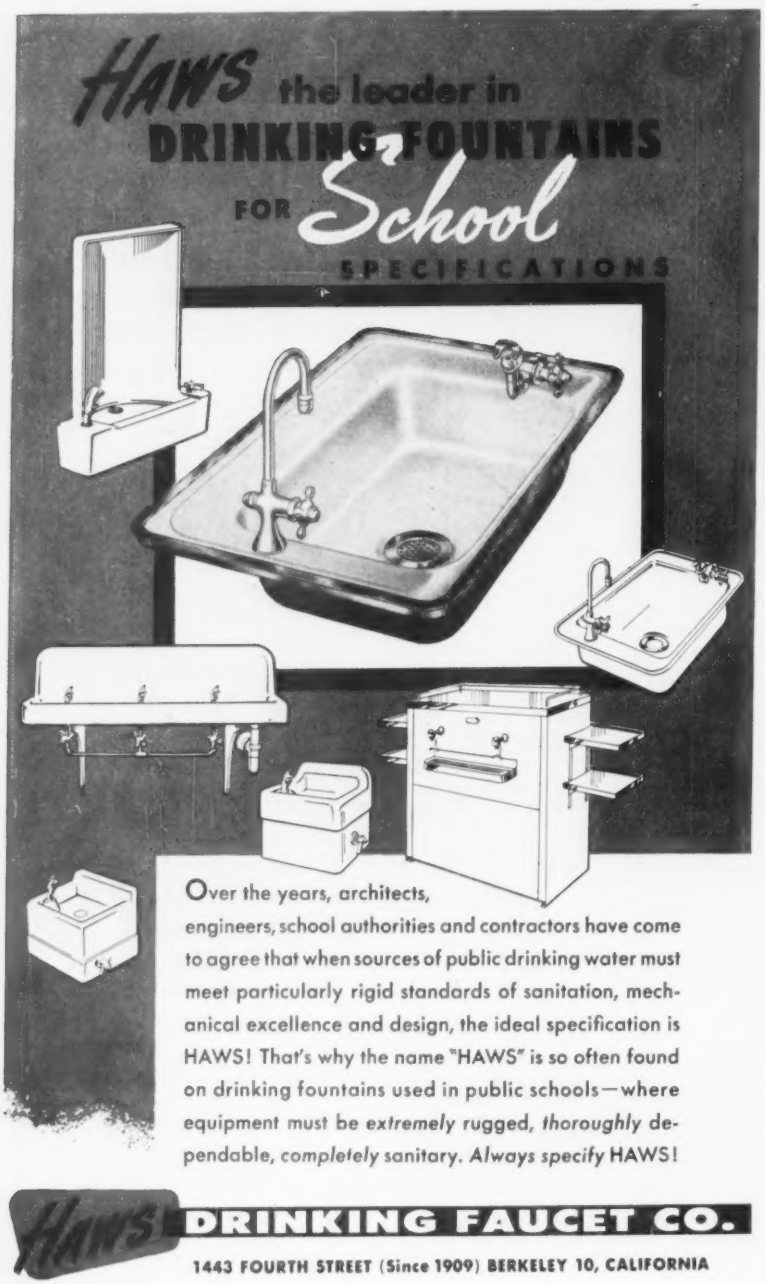
(*Continued From Page* 143)

have more than half the pupils in the state.

3. Lack of proposals for making a proper allocation of taxing powers between municipal governments and school districts.

The board, which comprises nine statewide education groups, also recommended that the basic program cost figure be increased from $320 to $340; that the tax rate for the local share of educational costs be reduced from $6.80 to $6.20, and that the maximum amount of state tax sharing in higher valuation districts be increased from $125 to $160.

Parent and teacher groups in New York City also registered disappointment in the Heald proposals. Reportedly, the commission's two most important proposals—increase in minimum teacher salaries and increase in the foundation program for pupils—would have no effect on the public schools in the city.



Over the years, architects, engineers, school authorities and contractors have come to agree that when sources of public drinking water must meet particularly rigid standards of sanitation, mechanical excellence and design, the ideal specification is HAWS! That's why the name "HAWS" is so often found on drinking fountains used in public schools—where equipment must be *extremely* rugged, *thoroughly* dependable, *completely* sanitary. *Always specify* HAWS!

HAWS DRINKING FAUCET CO.

1443 FOURTH STREET (Since 1909) BERKELEY 10, CALIFORNIA

Suggests Persons Who Could Alleviate Teacher Shortage

PRINCETON, N.J.—Retired scientists, housewives and motion pictures can help to solve the teaching shortage, according to one educator. Henry Chauncey, president of the Educational Testing Service, has suggested some new ways of using available manpower.

Large numbers of retired men and women in this country are a reservoir of talent, Dr. Chauncey said. These people could be recruited to take on part-time schedules and their help would be especially valuable in the fields of mathematics and science, he said. A retired physicist who was interested might learn to teach more easily than a basketball coach could learn physics, he pointed out.

College educated housewives could be attracted to teaching, he said, by changing the income tax laws to allow them to make deductions for the domestic help they would need at home. At present such deductions are allowed only to families whose income is under $3500.

Some of these women, who preferred to work at home, could read and correct English compositions, Dr. Chauncey suggested. He pointed out that little actual writing is being assigned in schools today because overburdened teachers do not have time to read papers.

Dr. Chauncey also urged the use of films for routine instructional purposes, in order to leave teachers free to give individual help to students.

Michigan Seeks Building to House School of Education

ANN ARBOR, MICH.—The state legislature has been requested to provide funds for the planning of a school of education building at the University of Michigan.

In announcing their request, university officials pointed out that the school at present grants more advanced degrees in education than any other tax supported institution in the country. The prospect of expanding enrollments and the critical need for teachers today will create a "desperate need" for additional facilities in the next few years, officials said.

The school of education is now housed in its elementary and secondary laboratory schools and in space borrowed from other departments of the university.





KYS-ITE®

molded plastic tableware has eye-appeal and keeps replacement costs almost at the zero mark

- ★ break-resistant
- ★ stain-resistant
- ★ lightweight, quiet
- ★ cleans easily
- ★ speeds up service
- ★ stays new-looking longer
- ★ nests neatly
- ★ handsome maple color

KEYES
MOLDED PRODUCTS

FILL IN THIS COUPON

Keyes Fibre Company, Waterville, Maine, Dept. NS

Please send further information on KYS-ITE tableware and KYS-ITE molded plastic trays.

NAME .....

NAME OF FIRM .....

ADDRESS .....

NEWS

Yonkers Education Board Describes Inadequate Funds

YONKERS, N.Y.—Reporting to the state commissioner of education, the board of education here has officially described its 1956 budget as "inadequate." Contents of the report make questionable whether the commissioner will allocate state funds for education to Yonkers.

In an April directive to the Yonkers board, Lewis A. Wilson, then education commissioner, said that the city had not provided sufficient funds for proper public education. He required the board to submit to him by January 1 evidence of a satisfactory program in order to receive state aid.

The present commissioner, James E. Allen Jr., at a hearing on February 3 gave all interested parties—the board of education, the city of Yonkers, and the Citizens Committee for Improving Yonkers Public Schools—17 days to file briefs and rebuttals. He said he hoped to reach a decision before the first installment of 1956 state aid was due April 10.

In its report, the school board described what it had planned to do with its requested budget of $7,270,950, and what it will be forced to eliminate after the Yonkers' Common Council pared its budget request to $6,431,000.

The Citizens Committee for Improving Yonkers Public Schools congratulated the board on its courage in making the report. The committee had first appealed to the state commissioner in June 1954 to make Yonkers provide adequate public schools.

"We feel that after hearing both sides" the commissioner will find that it is not lack of funds but lack of interest that has kept the council from doing what should be done for the schools, said the committee chairman, Charles S. Colby.

Mr. Colby noted that the council had had the "temerity" to grant over $500,000 in excess of their 1956 budget requests to 25 of the city's 27 departments, cutting only the school and library department requests.

The city has at present, he said, $25 million in unused bonding capacity. However, as the board pointed out in its report, the council has refused for two years to grant bondable school requests for $494,835 for equipment and library books. Nor has action been taken on a year-old request for $33,800 for window shades and draperies and $57,141 for furniture. Recently, the council split openly over school matters for the first time. Four of the nine Democrats refused to support their colleagues' nomination of Michael J. Nugent, council member and outspoken enemy of the public schools' administration, for vice mayor. A deadlock ensued.

"Playing Chicken" Is for the Immature, Says A.A.A.

WASHINGTON, D.C. — Teen-agers who play "chicken" by taking dangerous dares on the highway are immature rather than brave, says the American Automobile Association.

In a recently published pamphlet entitled "A Plan for Killing the Chicken," the association has outlined a program for any group interested in stopping practice of this highway game in its community. "This purposeless jeopardizing of life has become the concern of everyone interested in traffic safety," the association pointed out.

PRIMARY: Average gain over former procedures, reading groups using Keystone Tachistoscopic Training, 40%.

ELEMENTARY: Gains of remedial reading classes through Keystone Tachistoscopic Training, as high as 75%.

SECONDARY: Reading, Typewriting, and Shorthand —Keystone Tachistoscopic classes 46% to 68% faster than control groups.

COLLEGE: Entering freshmen with inadequate reading abilities improved 47% to 210%.

REPORTS ON REQUEST



Thousands of Schools are OBTAINING SUPERIOR RESULTS IN LEARNING with Keystone Tachistoscopic Training

Thousands of educators have learned that perceptive skill, once regarded as a talent of gifted students, may be developed rapidly in nearly all students who are given modern training.

Reading assignments are a tremendous burden for students who read at only 200 words per minute—**but this rate may be increased 50% to 75% in a few weeks of training.**

Invariably in controlled tests, the experimental groups see much FASTER, MORE ACCURATELY, and TAKE IN MORE WORDS at a glance—far outdistancing the control groups, and establishing a new principle of modern education:

It is futile to expect average learning capacity of a student whose perceptual skill is undeveloped.

No teaching procedure has ever had such unanimous approval from Research and Controlled Experimentation as has been accorded the Keystone Tachistoscopic Services. Reports on these studies will be furnished on request.

KEYSTONE VIEW COMPANY, Meadville, Pa.
Since 1892—Producers of Superior Visual Aids

KEYSTONE Tachistoscopic Services

have proved especially effective as aids in REMEDIAL and DEVELOPMENTAL READING, TYPEWRITING, SHORTHAND, BOOKKEEPING, CLERICAL TRAINING, MUSIC, ARITHMETIC.



entrance requirements to a practical classroom!



The No. 22 Chair. Die-formed steel electrically fused into one unit.

For college and high school lecture rooms, the *President* No. 103 Tablet Arm Chair.



Check them off! American Desk classroom furniture meets them all! At left is the Imperial Chair Desk No. 100. Sturdy . . . "quiet" . . . functional. Non-tip balance . . . generous heavily embossed book compartment . . . with 10-gauge die-formed steel frame and panels. Priced — with budget-economy in mind.

For Competent Assistance, Complete Details, ask Your State AD Representative.

american desk
MANUFACTURING CO.
TEMPLE, TEXAS



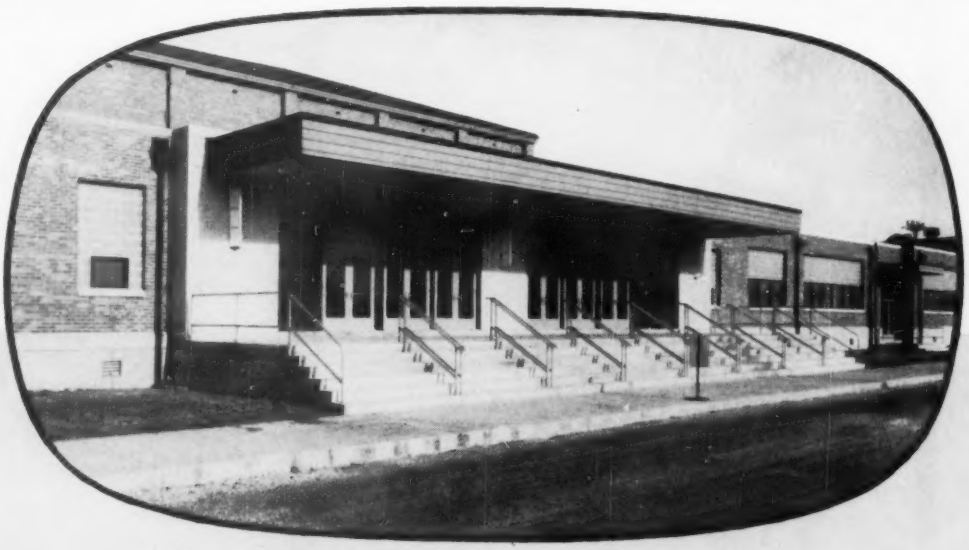
THE MAIN ENTRANCE of Assumption High School. The architects were Paul J. Saunders and Eugene S. Johnson. The engineer was John P. Nix. The general contractor was Wm H. and Nelson Cunliff Co.

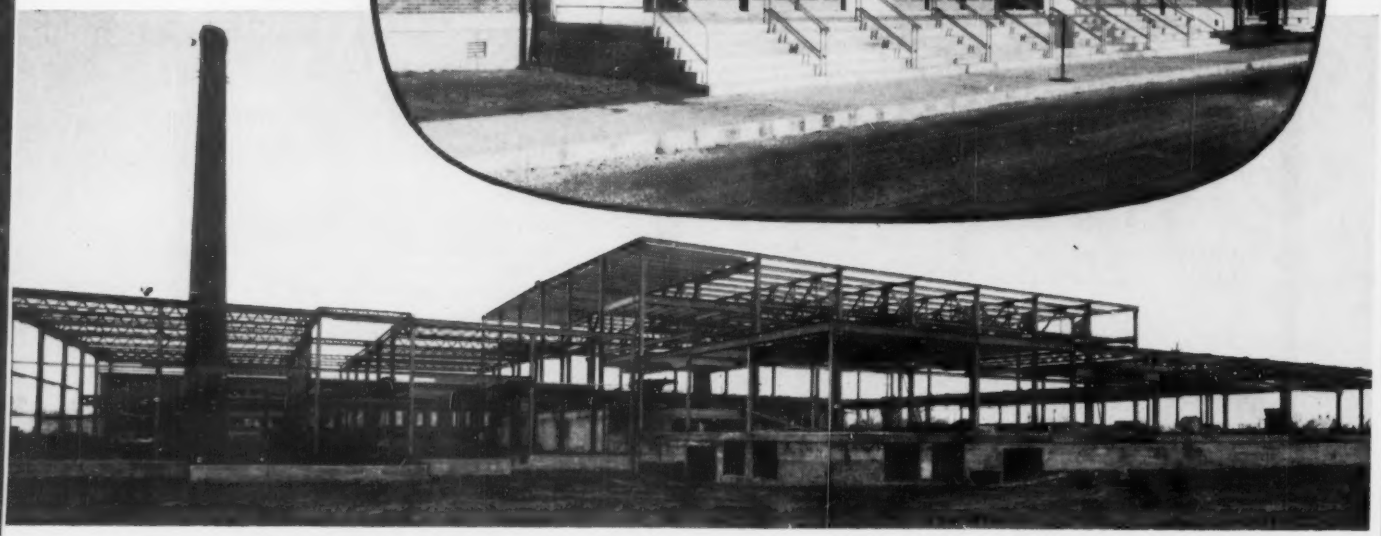


TWO STORY ACADEMIC UNIT, connected to the one story unit to which a second floor may be added in the future.

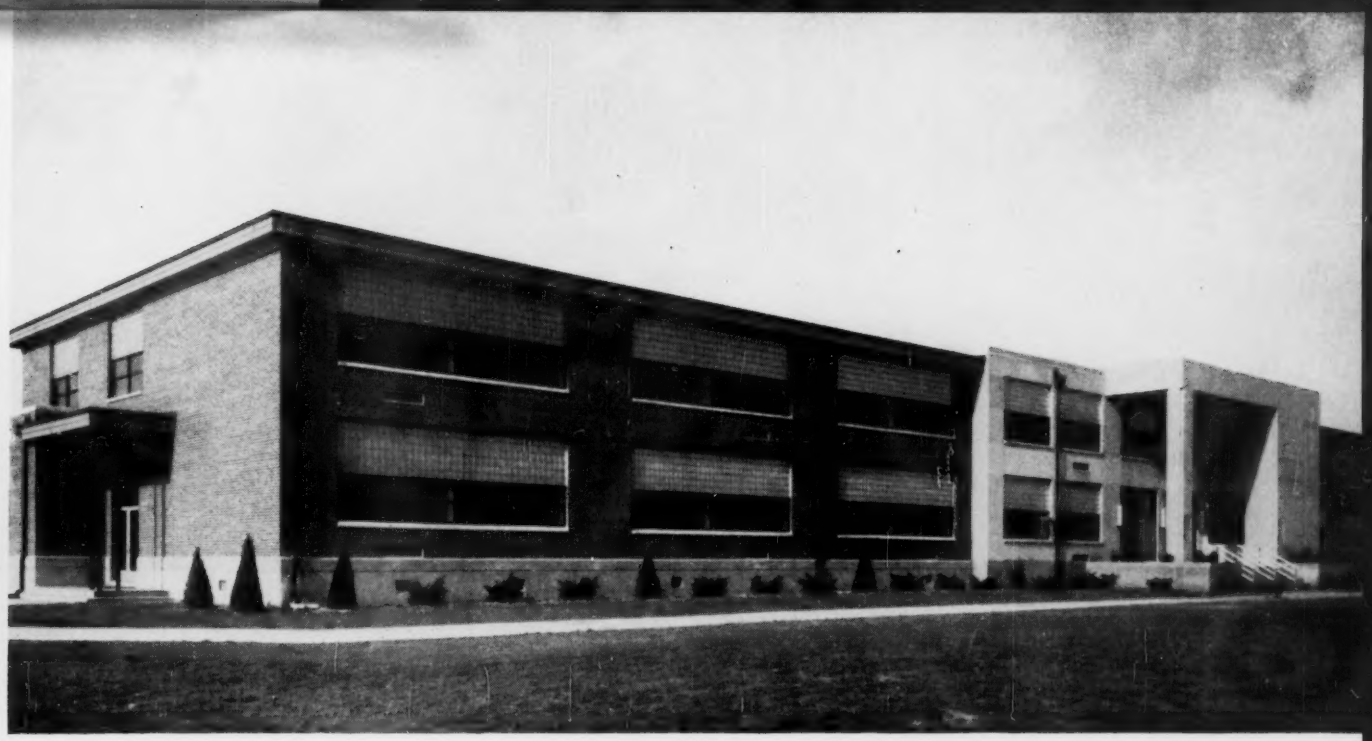
New High School designed with

ENTRANCE to the gymnasium unit. The small doorway to the right leads into a classroom area.





THE STRUCTURAL FRAMEWORK during erection. The more than 348 tons of USS Structural Steel, used in the building, were fabricated by The Mississippi Valley Structural Steel Co., St. Louis, Mo.



future expansion in mind

The Assumption High School of East St. Louis, Illinois, was built to accommodate 650 students with provisions for expanding horizontally and vertically to provide facilities for an eventual one thousand students.

The school consists of three units: an academic unit containing classrooms; a gymnasium unit including gymnasium, cafeteria, shops, and laboratories; and a Brother's House, independent of the other buildings, which contains living quarters for 24 Brothers. The academic unit has provisions for expansion to the east. In addition, a second floor can be added to the present one story portion. The Gymnasium Unit is designed so that there is sufficient physical education, shop, laboratory, and cafeteria space for additional students if classroom facilities are increased.

Structural Steel was used exclusively in the framing of this new school because of its versatility, its tremendous load bearing capacity, and its economy of use—qualities that make it ideal for *all* types of school construction. Small wonder that today's architects and engineers are specifying Structural Steel frameworks for more and more schools, churches, and small buildings. Just look at these advantages:

1. Structural Steel is the strongest, yet most economical of load bearing materials.

2. Structural Steel will withstand more abuse than other structural materials, effectively resisting torsion, tension, compression, and shear.

3. Once enclosed in buildings, it lasts indefinitely—requiring no maintenance.

4. Structural Steel may be riveted, bolted or welded . . . can be erected in any weather in which men can work.

5. Steel members are fabricated indoors; therefore, weather can have no effect on the quality of workmanship.



SEND FOR THIS FREE BOOK NOW

UNITED STATES STEEL CORPORATION, PITTSBURGH • COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA. • UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS STRUCTURAL STEEL

SEE The United States Steel Hour. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station.

USS

UNITED STATES STEEL

United States Steel Corporation
525 William Penn Place, Room 5101
Pittsburgh 30, Pennsylvania

Please send me my free copy of HOT ROLLED CARBON STEEL SHAPES AND PLATES

NAME .....

COMPANY .....

ADDRESS .....

CITY ..... STATE.....

(*Continued From Page* 134)

Some 65 per cent of the educators believed that information specifically requested by one newspaper should be sent to all newspapers; only 25 per cent of the newspapermen agreed.

Marked disagreement was also noted on "ground rules" for the press: Some 64 per cent of the superintendents thought that newsmen always should clear with them before contacting a teacher or principal; only 16 per cent of the newspapermen concurred.

Is it legitimate for a newspaper to take an editorial stand on the hiring of new school personnel? Some 80 per cent of the newsmen say Yes, against 40 per cent of school administrators.

More than 80 per cent of the newspapermen and schoolmen agreed that almost no school board business should be conducted in executive session. However, the two groups disagreed on specific issues that should have private hearing. Some 70 per cent of the press said a hearing on new salary schedules should *not* be closed to the public; only 40 per cent of the schoolmen agreed. Some 90 per cent of the superintendents said a morals charge against a teacher *should* be privately heard; 65 per cent of the newsmen agreed.

Dr. Gross pointed out that disagreement about nonpublic sessions was particularly significant in view of the newsmen's complaint that it is difficult to obtain information from the schools.

The survey also revealed newspapermen frequently want the schools to have "traditional" curriculum objectives, of which many superintendents disapprove.

Commenting on the study, Dr. Gross said it is essential that school officials and newsmen discuss their disagreements frankly.

"The public relations function of the superintendent . . . must be given high priority," he said. "Many existent practices (such as closed school board meetings) and many attitudes (such as 'the press should print only favorable news') require reassessment by school board members and officials.

"Many newspapers would profit by a critical examination of their press practices in dealing with schools.

"Nearly one-sixth of the newspapers accepted as a valid criticism of their papers that the press does not work to make significant facts about education interesting. One out of every 10 accepted as justified criticism that the press overemphasizes 'bad' or 'sensational' news. Many newspapers never cover public school board meetings in their own communities."

He added: "That school news demands a higher priority than many newspapers give it is a proposition that deserves careful examination by editors and publishers."

Illinois Governor Says Federal Aid Unnecessary

SPRINGFIELD, ILL.—Illinois is capable of and willing to handle its own school problems without federal aid, declares Gov. William Stratton.

In a recent press conference, the governor said that experience in Illinois has shown that states can provide for their schools without help from the government.

Governor Stratton said he is concerned about the plan proposed by President Eisenhower because:

1. He is not certain that the President's program is the end insofar as federal aid and consequent federal control of the schools would be concerned.
2. Under the formula proposed, Illinois would receive less than the tax money Illinois citizens would pay to support the program.

Asks Special Legislative Meeting on Illinois Schools

CHICAGO.—Cook County's school superintendent, Noble J. Puffer, has asked Gov. William Stratton to call a special meeting of the legislature to deal with the school building crisis in Illinois.

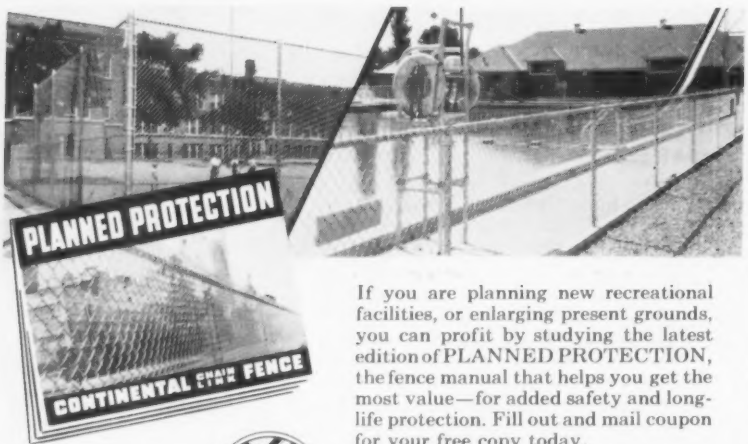
Mr. Puffer charged that the governor's veto of a $4 million loan fund proposal last year has blocked aid at the state level.

In order for needy districts to qualify for federal aid under the Administration's proposed plan, Mr. Puffer pointed out, they must have state matching funds.

In a letter to the governor, Mr. Puffer said, "If you do not feel you can cooperate [in calling a special session] the only alternative these districts have is to seek federal aid in the form of direct grants. I would prefer to meet our problems at the state level."

NEW FENCE FACTS

For Schools, Playgrounds, Tennis Courts, Swimming Pools



If you are planning new recreational facilities, or enlarging present grounds, you can profit by studying the latest edition of PLANNED PROTECTION, the fence manual that helps you get the most value—for added safety and long-life protection. Fill out and mail coupon for your free copy today.

The only Chain Link Fence made of Konik Steel.

KONIK STEEL

CONTINENTAL
STEEL CORPORATION · KOKOMO, INDIANA

PRODUCERS OF: Manufacturer's Wire in many sizes, shapes, tempers and finishes, including Galvanized, KOKOTE, Flame-Sealed, Coppered, Tinned, Annealed, Liquor Finished, Bright, and Special Wire. Also coated Steel Sheets, Nails, and other products.

MAIL COUPON FOR FREE COPY

Please send free copy of PLANNED PROTECTION

NAME_____

TITLE_____

ADDRESS_____

CITY & STATE_____

Must students have...

ATHLETE'S FOOT ?

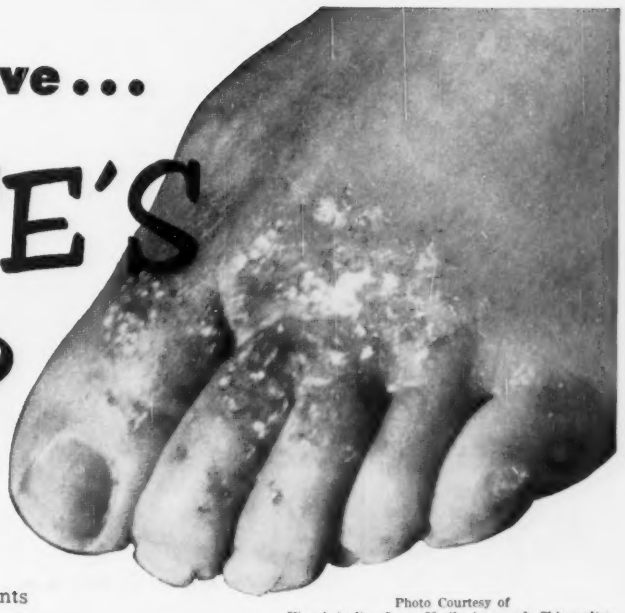


Photo Courtesy of
Visual-Audio Com. Nat'l Assn. of Chiropodists

Leading skin specialists report that if your students wear shoes, Athlete's Foot may crop out at any time. Why? Because shoe-softened feet are highly susceptible to the fungi that causes Athlete's Foot. Nature built feet to walk on soft, uneven ground, and when feet are covered by shoes . . . the skin does not have a chance to "breathe" in the manner nature intended.

The foot skin performs the important process of eliminating certain body waste and poisons. This is what we call "sweating".

As this waste (or sweat) accumulates on the feet, it begins to decompose. This heats and irritates the skin . . . and then the real trouble begins. At first, the only sensation is itchy, burning, uncomfortable feet. Later, abrasions and open sores appear between the toes and over the skin. You know the story from there, habitually sore feet, more students absent from classes, and a general unhappiness.

HEALTHY SKIN BEST DEFENSE!

Since we live in a modern age and your students can't go barefooted, there is only one solution: *condition the feet so the skin is tough, so that it resists the natural bacteria and fungi that are always with us.*

A report presented to the American Public Health Association states that it is useless to attempt to sterilize articles in and around bathrooms, showers, and swimming pools, or to impregnate them with fungistatic agents. This report proves beyond any doubt that the only *real answer* is to properly condition the skin to resist fungi.

HOW FOAM-X CONDITIONS FEET!

Foam-X does a complete job of foot conditioning because *Foam-X destroys the fungi that causes Athlete's Foot.* It works in a gentle, non-toxic manner that builds up skin condition and toughens the foot at the same time.

Because Foam-X works in such a natural way, it can clear up Athlete's Foot in your school 100%. Try Foam-X. Use it as directed. If, in thirty days, it does not clear up cases of Athlete's Foot in your school . . . if Foam-X does not live up to your expectations *in every way,* it costs you nothing. This is the unconditional satisfaction guarantee given to you by Huntington Laboratories, Inc.!

PUT FOAM-X TO THE TEST!

You can see for yourself how Foam-X works to reduce Athlete's Foot. Simply order a thirty days' supply of Foam-X. Use it as directed. It can . . . and must . . . leave your school 100% free of Athlete's Foot. Thousands of schools throughout the country are using Foam-X today. Try it in your school and then you will find out that students don't have to have, and keep, Athlete's Foot!

Here's What School Men are Doing About the Problem of Athlete's Foot:

MACOMB, ILLINOIS:

"Foam-X has solved our problems! We had a few cases of Athlete's Foot but Foam-X has checked them."

Athletic Director

GAHANNA, OHIO:

"We had several cases of Athlete's Foot just before using Foam-X. There are no known cases of Athlete's Foot now that I know of. We are satisfied in every way with Foam-X."

Supt.

HOUSTON, MINNESOTA:

"Foam-X has reduced Athlete's Foot in our schools and the pupils enjoy using it."

Principal

HUNTINGTON LABORATORIES

Huntington, Indiana

Philadelphia 35, Pa. Toronto 2, Ontario

MANUFACTURERS OF FOAM-X AND OTHER QUALITY PRODUCTS

THE
PREFERRED
PLUMBING

CR

HOW TO CUT THE AMERICA'S 80 MILLION



NEU-SPRAY DIAL-ESE lavatory supply fittings with raised spout and integral spray. The spray is gentle on young hands . . . saves water. Dial-ese controls are easier to operate, longer lasting, and easier to service, too.

CRANE

COST OF WASHING BUSIEST HANDS

The cost of plumbing today is not an "academic" question. It's an extremely "real" problem to you and other school officials concerned with meeting big needs with small budgets.

Crane plumbing fixtures help solve that problem for you in three important ways.

In the first place, famous Crane school fixtures actually cost your school no more than ordinary plumbing.

Too, they reduce your maintenance and repair costs far below average. For example, Dial-ese faucets have no rubber washers to wear out, so they seldom need care. And, if they ever do, it takes just 90 seconds. Crane off-the-floor fixtures cut floor cleaning time 50% — make really sanitary floors less of a chore.

Finally, Crane school plumbing fixtures last years and years longer. They are specially designed to absorb all the use and abuse an army of youngsters can hand out!

Why not ask your architect to specify Crane for your new or remodeled school? That's the wisest way to cut the cost of washing your share of 80 million little hands . . . today, and for years to come.

CRANE CO.

General Offices: 836 South Michigan Ave., Chicago 5, Illinois

VALVES • FITTINGS • PIPE • KITCHENS • PLUMBING • HEATING



NORWICH. New wall-hung vitreous china lavatory with 4½" backsplash. Integral liquid soap chamber. Neu-Spray Dial-ese supply fittings.



YORKSHIRE. Wall-hung vitreous china lavatory with convenient shelf back, splash lip and soap depression. Neu-Rainier Dial-ese supply fittings with aerator.



DIAL-ESE REPLACEMENT cartridge. Easiest maintenance ever. All working parts are in one low-cost cartridge. Replacement takes 90 seconds. Lasts for years.

NEWS

G. R. Koopman, R. Gilchrist Take Top A.S.C.D. Posts



G. R. Koopman

WASHINGTON, D.C.—G. Robert Koopman, associate state superintendent of public instruction in Michigan, is the new president-elect of the Association for Supervision and Curriculum Development. Robert Gilchrist, superintendent at University City, Mo., will succeed Gordon N. Mackenzie of Teachers College, Columbia University, as president of the association.

Mr. Koopman was formerly chairman of the Society for Curriculum Study, an independent organization which merged with N.E.A.'s department of supervisors and directors of instruction to form A.S.C.D. after World War II. He has served on the board of directors of A.S.C.D. for two three-year terms.

Mr. Koopman and Dr. Gilchrist will assume their new responsibilities at the close of the A.S.C.D. convention to be held in New York March 19 to 23. The conference will feature clinics, workshops and study-discussion groups around the theme, "Creative Thinking, Living and Teaching." Among those addressing the group will be Harold Taylor of Sarah Lawrence College, Gardner Murphy of the Menninger Foundation, and W. H. Whyte Jr. of *Fortune* magazine.

SHELDON
CHICAGO U.S.A.

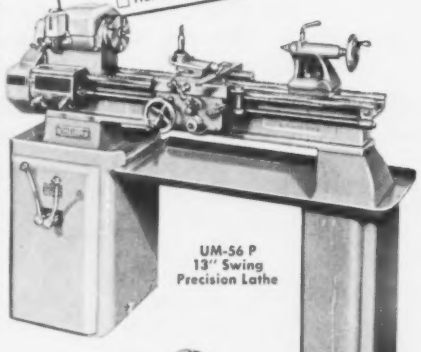
Better Machine Tools for Teaching
. . . safer to operate, easy to learn on

For every school shop, laboratory and classroom . . . (from beginning classes in industrial arts and vocational education through advanced courses in trade schools and universities) . . . Sheldon builds a lathe to fit each academic, space and budget requirement.

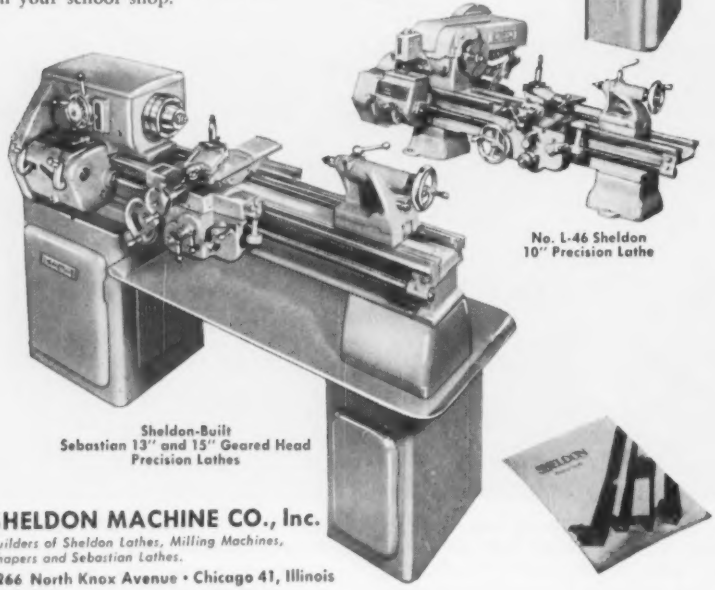
Sheldon lathes are modern in design. With their easy-to-operate controls, students can learn basic lathe operations quickly and rapidly advance to practical shop projects.

From the largest 15" swing geared head lathe to the smallest 10" swing bench lathe, every Sheldon-built lathe meets the same rigid standards . . . standards that insure long life with minimum maintenance requirements in your school shop.

SHELDON MACHINE CO., INC.
4266 North Knox Ave., Chicago 41, Ill.
Gentlemen: Please add my name to your Shop Instructors mailing list:
Name ..... ☐ School ☐ Home
School .....
Street Address ..... Zone ..... State .....
City .....
PLEASE SEND ME YOUR NEW CATALOGS DESCRIBING
☐ 10" ☐ 11" ☐ 13" Sheldon Lathes
☐ 13" ☐ 15" Sebastian Geared Head Lathes
☐ Horizontal Milling Machine ☐ 12" Shaper



UM-56 P
13" Swing
Precision Lathe



No. L-46 Sheldon
10" Precision Lathe

Sheldon-Built
Sebastian 13" and 15" Geared Head
Precision Lathes

SHELDON MACHINE CO., Inc.
Builders of Sheldon Lathes, Milling Machines, Shapers and Sebastian Lathes.
4266 North Knox Avenue • Chicago 41, Illinois

New Council to Emphasize Help for Citizens Groups

WILMINGTON, DEL. — Primary job of the new National Citizens Council for Better Schools will be to help local and state citizens committees solve their educational problems.

According to its executive director, Henry Toy Jr., the organization plans to do a somewhat different job from that of its predecessor, the National Citizens Commission for the Public Schools. One of the major jobs of the earlier commission was to arouse public interest in the schools.

Mr. Toy pointed out that today most states have citizens committees, and some 12,000 local citizens groups are now in existence. Reporting on a recent executive committee meeting, Mr. Toy said the council will place more emphasis on strengthening these groups and working with them on the local level.

Red China Orders Indoctrination in Children's Literature

WASHINGTON, D.C. — Authors in Red China have been ordered to put communism into children's literature. Every writer is to produce at least one children's work this year which reflects the Communist spirit, the U.S. Information Agency reports.

The directive, printed by the New China News Agency and issued by the Union of Chinese Writers, says:

"It is absolutely essential to enhance the ideological and political character of the literary works for juveniles and children. Such character should be manifested through the form of vivid and artistic symbols. There must be novels, stories, poems, songs and plays. There must also be fairy tales, folklore, scientific and imaginative reading matter, and sensational novels. Works should indoctrinate the juvenile and children with the Communist spirit."

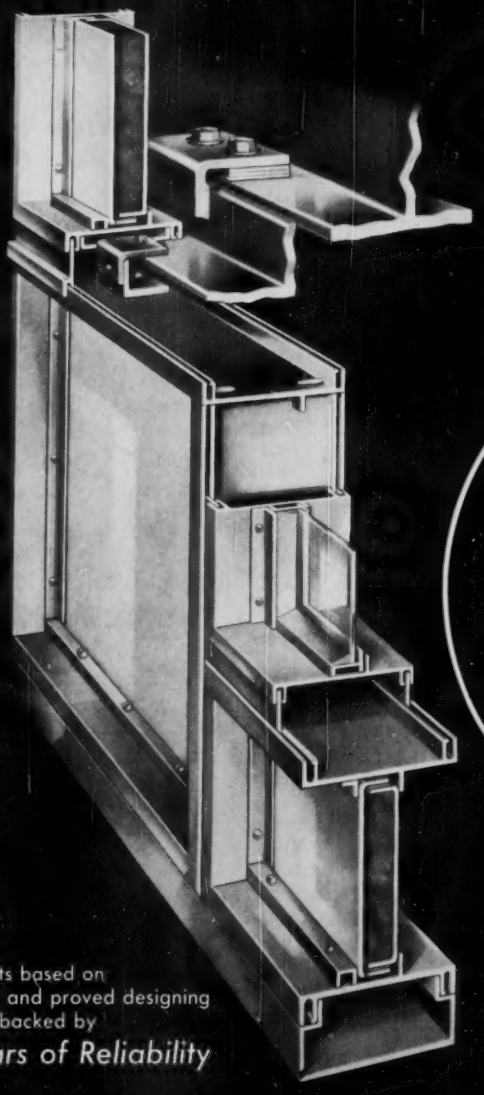
Today's Latest Advancement for Versatility of Application

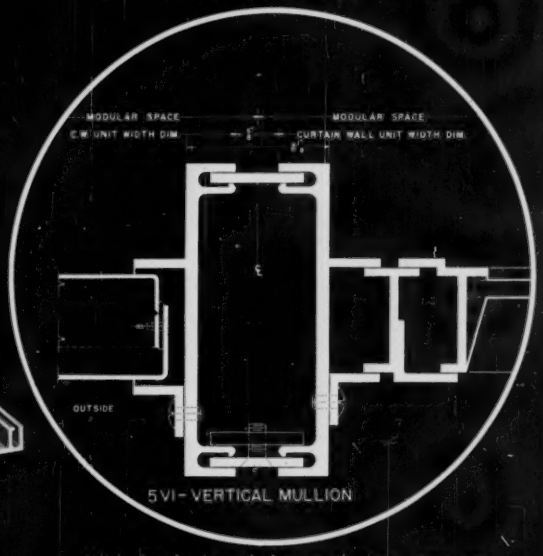
Bayley

Aluminum CURTAIN-WALL System

Modular or Conventional

Series A-450





5VI-VERTICAL MULLION

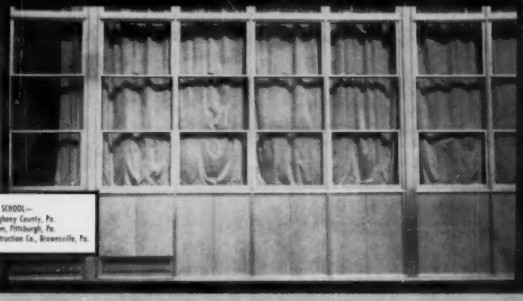
Progressive advancements based on fundamental and proved designing backed by

76 Years of Reliability

With Bayley's sub-frame designs you can achieve distinctive, individualized curtain wall treatments, of almost unlimited variety, without the costliness of special window designing. Standard Bayley Aluminum Projected Windows, with heavy channel frames and a choice of ventilator arrangements, serve as the basic unit . . . and at the same time afford the maximum in air, light and vision. Combining versatility of application with standard details and sections, Bayley can help you accomplish some surprising and exciting things.



WHITEHALL JUNIOR HIGH SCHOOL—
Baldwin Township, Allegheny County, Pa.
Architect—Altenhof & Bown, Pittsburgh, Pa.
Builder—Brownsville Construction Co., Brownsville, Pa.



See Bayley's catalogs in Sweet's . . . aluminum windows 17a/Bay; and steel windows 17a/Ba; or ask us for individual reference-file copies. Write for special file on Bayley Curtain Wall Ideas, Designs and Details.

The WILLIAM BAYLEY Co.

Springfield, Ohio *Agents in All Principal Cities*

District Sales Offices:

Springfield • Chicago 2 • New York 17 • Washington 16

your dishes are

Microscopically Clean with a

Kewanee!



Save the extra wages you pay to have dishes washed by hand—and have plates, cups, glasses, silverware, pots and pans washed *faster* and *sanitarily clean!* A Kewanee Dishwasher washes, sanitizes and dries dishes at the rate of over 2000 per hour. Wash water at 120° to 160° begins sanitation . . . rinse water at 180° positively kills pathogenic bacteria. Rapid air-drying prevents recontamination from towels.

A Kewanee heats and pumps its own water . . . no booster is needed for your present system. You save on wages, dish breakage, wasted detergent and hot water. Optionals include extra plastisol-coated dish baskets and space-saver drainboards for extra loading and drying space.



THIS COUPON COULD SAVE YOU A THOUSAND DOLLARS OR MORE IN 1956! MAIL IT TODAY!

Kewanee Dishwasher
802 Burlington Ave.
Kewanee, Illinois

Rush complete facts on time-saving, money-saving KEWANEE DISHWASHERS—at no cost or obligation.

Name_____

Establishment_____

Street_____

City_____ State_____

NEWS

School Holidays Questioned by Stamford School Board

STAMFORD, CONN. — Lincoln's Birthday and Columbus Day can be better observed in the classroom than out of school, the board of education here believes.

Board members recently passed a resolution proposing to eliminate these days as school holidays. The resolution is a proposal only, but the board hopes that the townspeople will support the idea.

However, opposition to the "in-school holidays" has been registered by the Central Veterans Association and the Knights of Columbus. A school holiday shows that this town holds dear the name of Columbus, the Knights of Columbus said.

In near-by Darien, Supt. Sidney P. Marland indicated he believed firmly in fewer one-day holidays. "We're in school to educate children," he said. "You don't educate them by closing schools. Children can celebrate a holiday far more satisfactorily in school than by riding a bicycle or playing marbles."

Courses for Certification Offered to College Graduates

BROOKLYN, N.Y. — Brooklyn College is offering a special tuition-free program to enable mothers who are college graduates to qualify for teaching certificates. Refresher courses in general knowledge as well as professional training are being given.

A similar program will be initiated this summer at Bowling Green State University in Ohio. College graduates who did not take teacher training may qualify for teaching certificates or work toward a master's degree in education.

Place Children by Ability, Not Age, Educator Proposes

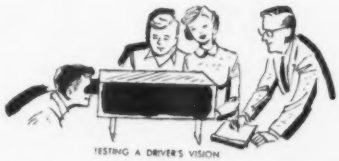
CHICAGO. — Age-grade placement is traditional but unscientific, thinks the Rev. John C. Lynch, associate professor of education at De Paul University.

He recommends bringing together all bright children in elementary or high school and teaching them at an accelerated rate, rather than imposing age and grade limitations upon them.

If children are not taught at the level of their ability, he pointed out, they are encouraged in "lassitude and lazy habits."

For the **BEST** in High School **DRIVER EDUCATION**

See AAA Driver Testing Equipment



Since 1939, America's largest distributor of over 30 devices, including detonators, working models, and tests for vision and reaction time.

Send today for free catalog

American Automobile Association
1712 G Street, N. W.
Washington 6, D. C.

FREE—
Samples shipped on request



- MULTI-PURPOSE DESKS
- TYPEWRITER DESKS
- BOOKKEEPING DESKS
- ART DESKS
- DESKS TO YOUR ORDER
- POSTURE CHAIRS
- CLASSROOM CABINETS

Write for free catalog and copy of important summary—"The Proper Use of Typing Desks."

DESKS OF AMERICA, INC.
School Division
BRIDGEPORT 6, CONN.

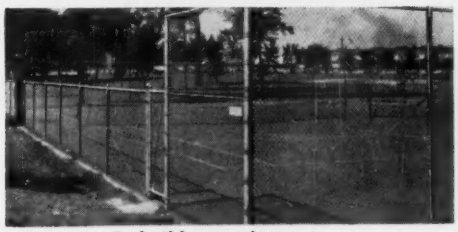
Whatever your school fencing needs... get the best



To enclose school property . . .



To fence a football field . . .



To build a tennis court . . .

NO JOB IS TOO LARGE—
*NO JOB IS TOO SMALL FOR CYCLONE**

**Cyclone is the trade-mark name of fence made only by Cyclone. Accept no substitute.*

CYCLONE FENCE DEPT., AMERICAN STEEL & WIRE DIVISION
UNITED STATES STEEL CORPORATION
WAUKEGAN, ILLINOIS • SALES OFFICES COAST-TO-COAST
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

Fence is a vital, indispensable part of every well-run modern school. Fence serves a variety of different purposes—from protecting valuable property to making safe play areas for small children.

And because fence is so important to school operation, it pays to have good fence that will assure years of trouble-free service. Such a fence is Cyclone. Wherever Cyclone Fence has been installed it has proved that it has the strength and stamina to stand up, even under severe conditions of weather and service.

You can buy cheaper fence than Cyclone, but it will probably cost you more per year. Cyclone gives full value for your dollar. Nothing but brand-new, top-quality material is used throughout. Posts and top rails are heavy and rigid. Gates won't drag. The chain link fabric is woven from heavy steel wire and galvanized *after* weaving for greatest resistance to rust and corrosion. And Cyclone Fence is erected by full-time, Cyclone-trained experts. Ask our experienced engineers for advice, and send coupon for free Cyclone Fence booklet.

Cyclone Fence
Dept. M-36, Waukegan, Ill.
Please send me without obligation, complete information on Cyclone Fence and Gates.

Name .....

Address .....

City ..... **State** .....

USS CYCLONE FENCE

SEE THE UNITED STATES STEEL HOUR. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station.

USS

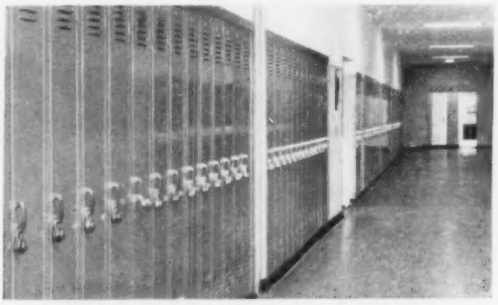
UNITED STATES STEEL



Excellent use is made here of Truscon Intermediate Projected Steel Windows. Fontenelle Elementary School, Omaha, Nebraska; Wallace & Burrill, Inc., Architects; Parsons Construction Company, Contractors.



Floors in the Dutch Broadway High School, Elmhurst, N. Y., are made lightweight and fire-resistant with Truscon "O-T"® Open Truss Steel Joists. Here are strength and safety at low cost per square foot. Do you know about Truscon's new Clerespan® Steel Joist, 96 feet long? Send coupon for details.



These Republic Standard Single-Tier Lockers serve students in the Abraham Lincoln High School in Philadelphia, Pa. Fabricated at Republic's Berger Division, they're part of a big line of steel lockers for every school or factory requirement. Mail coupon for complete data.

REPUBLIC

REPUBLIC STEEL

World's Widest Range of Standard Steels

TRUSCON STEEL WINDOWS

Daylight Omaha's New Fontenelle School

Classrooms today are brighter, lighter, and more cheerful thanks to the increased use of windows in school construction. Outside walls, once with limited glass area, are now fabricated almost entirely from windows with the *strength of steel.* The result is better over-all illumination—and vastly improved ventilation.

A splendid example of this new trend in school design is Omaha's beautiful Fontenelle Elementary School, in which two important Truscon Steel Window types were used.

The classrooms, for example, were well-daylighted by Truscon Intermediate Projected Windows that can be custom-built to exact specifications. Specially rolled solid steel sections of original design provide advantageous weathering and attractive appearance. Upper lights can be glazed with one of several types of light-diffusing, glare-reducing or heat-absorbing glass.

Fontenelle's beautiful new gymnasium is equipped with Truscon Donovan Awning Windows that offer superb lighting and ventilation without drafts. Ventilators which operate in unison, either by mechanical control or completely concealed operators, permit ventilation in inclement weather.

These are but two of the many types of Truscon® Steel Windows currently being specified for school construction. Others are: Double-Hung Steel Windows; Intermediate Combination Windows; Maxim-Air® Steel Windows; Truaire® Windows; Architectural Projected Windows. Ask your Truscon representative or send coupon below for details and specifications. Also in Sweet's File.



These handsome Donovan Awning Windows are perfect for gymnasiums. Teacher at Fontenelle Grade School in Omaha is shown regulating them for proper ventilation.

STEEL

and Steel Products

REPUBLIC STEEL CORPORATION
Dept. C-1378
3184 East 45th Street
Cleveland 27, Ohio

Please send me additional information on the Republic Steel Building Products indicated:

☐ Intermediate Projected Windows ☐ Steel Joists
☐ Donovan Windows ☐ Lockers

Name_____ Title_____

Company_____

Address_____

City_____ Zone____ State_____

NEWS

Recruitment. The New York City Board of Education is considering the formation of a special commission on science training. Purpose of the proposed commission would be to seek solutions to the present shortage of science teachers in the city schools and to interest youths in science careers.

Citizens Council. New York's state department of education is considering the creation of a statewide council of laymen's groups to enlist wider citizen support for better schools. The proposed council would provide a common meeting ground for representatives of parent-teacher, religious, business, labor and farm groups. It would have a semi-advisory status in relation to the state department of education.

Freedom, Fear and Learning. John Lester Buford, president of the National Education Association, testified at a hearing of the Senate subcommittee on constitutional rights in December. Speaking on freedom of thought, he said, "Academic freedom has been impaired or denied not only through pressure brought upon teachers but by censorship of textbooks and teaching materials." Mr. Buford pointed out that a climate of fear often fostered "by local pressure groups is abridging freedom to the detriment of the learner."

Diversified Science Study. Beloit College in Wisconsin plans to initiate a new kind of college training for prospective science teachers. The program will permit students to have a divisional major, including work in six different scientific areas, rather than the single departmental major in a specific science formerly required. The program is designed to provide more adequate background for high school teaching.

The Learning Problem. Herold C. Hunt, undersecretary, U.S. Department of Health, Education and Welfare, will make the keynote address at the National Science Teachers Association convention in Washington, D.C., May 14. Convention theme is "Problem Solving: How We Learn."

It's Growing. Membership in the National Education Association reached a December midyear peak of 575,715, some 10 per cent higher than 1954-55 midyear figure. The *N.E.A. News* predicted membership could reach an all-time high of approximately 665,000 this year if enrollment continues at this pace.

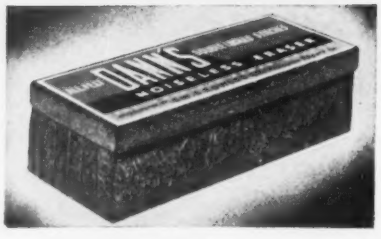
Tuned to the Lawmakers. For the second consecutive year, the Arizona Education Association is sponsoring daily newcasts covering state legislative sessions. At 6:55 o'clock each evening, the day's legislative action is summarized, and pros and cons of various measures are reviewed. Radio stations in eight Arizona cities carry the program.

Responsibility. A "Safety Charter for Children and Youth" has been formulated by nine organizations concerned with safety and education. The charter outlines safety conditions which should be provided for young people in homes, schools and communities. It may be adopted by any interested group and is available from the National Safety Council, Chicago.

Unto the Least of These. The Easter Seal Society's annual report shows that in 1955 more crippled children and



DANN'S NOISELESS ERASERS



Here's a chalkboard eraser that erases with amazing efficiency, is easy to clean and is built to give you twice the wear.

It's noiseless and sanitary. Made of the finest firm, dense, wool felt that cleans better. Sewed throughout with two-thread, double-locked stitches that assure longer wear.

For easier erasing . . . try a DANN's! You'll like them.

ERAS-O-MATIC
ELECTRIC ERASER CLEANER

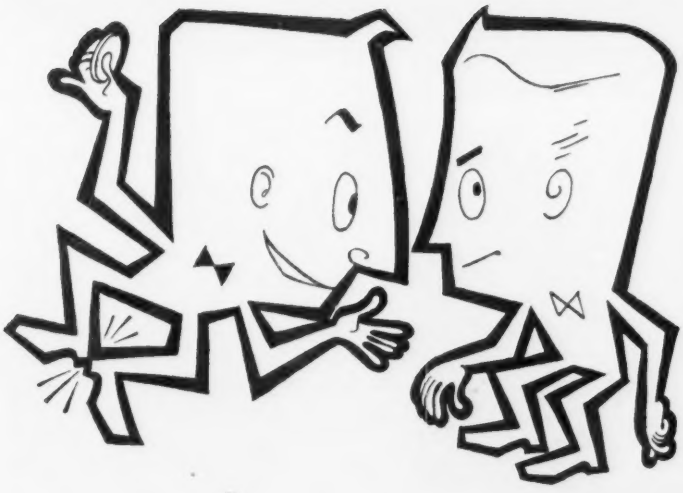
Eras-O-Matic cleans your chalkboard erasers quicker and better than any other method. Two-way action brushes deeply imbedded chalk dust loose, and then powerful suction whisks it off into the bag where it cannot escape into the room. Fast. Efficient. Safe. Any student can operate the Eras-O-Matic.



ROWLES School Equipment

For complete information on Dann's Erasers and the Rowles Eras-O-Matic Cleaner, see your Local Rowles School Equipment Dealer.

E. W. A. ROWLES COMPANY ARLINGTON HEIGHTS, ILLINOIS



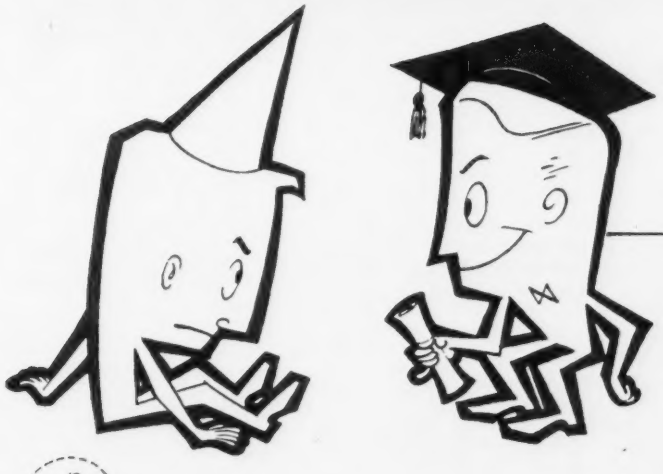
Look! I can buy coal for much less a ton than you're paying.

I used to buy that coal too, but it costs more per million BTU's with a whole lot more in hidden costs.



What do you mean by "hidden costs"?

That coal you're talking about is high in ash. So we were buying ashes at the coal price, paying freight on them from the mine, then paying to have them hauled away. Your "cheaper" coal clinkers; it smokes; it fouls the tubes. That means higher labor costs and higher maintenance. Now I pay more per ton and save thousands of dollars a year.



Coals produced on the C&O are tops in quality.

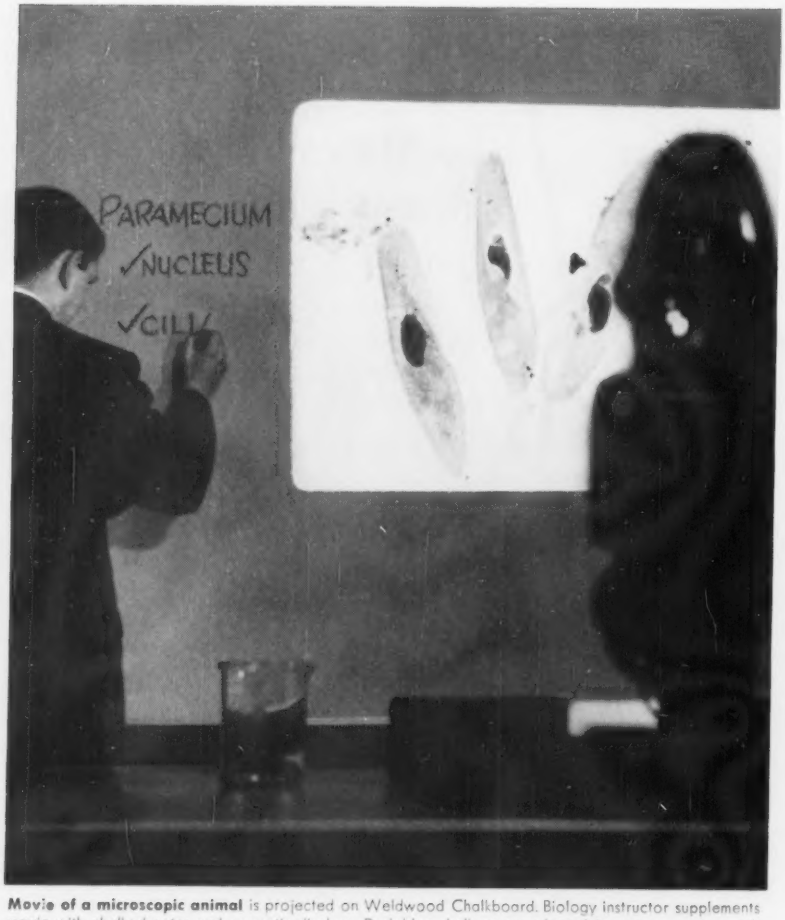
A C&O combustion engineer showed me why this grade of coal would work best in our type of installation and our experience has shown he was right. You'd better get some expert advice. It can save you money, too.

P.S.

There's a lot more to buying coal than the cost per ton. Why not contact coal producers on the C&O to solve your particular fuel requirements, or write to: R. C. Riedinger, General Coal Traffic Manager, Chesapeake and Ohio Railway Company, Terminal Tower, Cleveland 1, Ohio.

Chesapeake and Ohio Railway

WORLD'S LARGEST CARRIER OF BITUMINOUS COAL



Movie of a microscopic animal is projected on Weldwood Chalkboard. Biology instructor supplements movie with chalked notes and magnetic displays. Dark blue chalk on gray board is extra easy to read.

New "teaching wall" takes chalk, shows movies, holds magnetic teaching aids

A wall of new gray Weldwood Chalkboard helps schools and training classes save on equipment, on floor space, on teachers' time—and students learn *more*.

What it is. Unique Weldwood Chalkboard consists of a porcelain-on-steel face* bonded to strong, rigid plywood, and backed by a sheet of aluminum. It *never* needs refinishing, will never shatter, buckle, warp or break. It's *guaranteed for the life of the building* in which it is installed.

As a superior chalkboard—its velvety surface prevents chalk "squealing" and allows easy writing. Easy reading, too!

As an ever-ready projection screen—gray Weldwood Chalkboard ends the need for bulky movie and still-projection screens. *Whole wall* for a screen gives fine viewing from any seat, any angle.

As a magnetic visual aid board—charts, display cards, bulletins, even actual materials can be quickly fastened to the board with small magnets.

Like to know more? Ask your architect (he'll find details in Sweet's) or send coupon. To see Chalkboard, and the Weldwood line, including paneling and doors, visit any of our 87 offices in principal cities.

*Porcelain faces by The Bettinger Corp.

Weldwood®
CHALKBOARD
A product of
United States Plywood Corporation
Weldwood—The Best Known Name in Plywood in Canada: Weldwood Plywood Ltd.

United States Plywood Corporation
Weldwood Building,
55 West 44th St., New York 36, N. Y.
Please send me complete details on new gray Weldwood Chalkboard (No. 221-I) NS3-56

NAME.....
ADDRESS.....
CITY.....STATE.....

NEWS

adults were helped through the society's facilities than in any previous year. Total case load of the agency increased 23 per cent over 1954; services were given to 122,319 children under 21 years of age.

Put Them to Work? A sociology professor has suggested that cutting the compulsory school age and allowing poor students to go to work would curb juvenile delinquency. The Rev. Ralph Gallagher of Loyola University urged this step because, he said, "certain types of boys and girls apparently do not want to go to school and have no capacity to learn."

Plea for More Equality. Speakers at the recent annual meeting of the Association of American Colleges urged greater financial support for women's colleges. Procter and Gamble is the only company which has set up a scholarship program specifically for women's colleges, it was reported. Women are the dominating influence in the consumer's market, and manufacturers should recognize this fact with increased support for their education, it was asserted.

Milk Funds. Authorization for an additional $10,000 to carry out the special school milk program has been requested by Secretary of Agriculture Ezra Taft Benson. The request, said Mr. Benson, is in accordance with President Eisenhower's farm message. Fifty million dollars has been authorized so far for the program during the current fiscal year.

Good News From Harvard. "The number of graduates from strong liberal arts colleges being recruited for public education by the Harvard Graduate School of Education has almost tripled in recent years," said Nathan M. Pusey, president of that institution, in a recent report.

'Ten-shun! The government has announced plans to recruit retired military officers and other former armed forces personnel as high school teachers. In the opinion of the Labor Department, the recruiting program if successful would help to ease the teacher shortage, particularly in the fields of mathematics and science.

And in Addition. Seventy-nine per cent of the men and 18 per cent of the women teachers in Portland, Ore., "find

(*Continued on Page* 164)



EASY DOES IT!

Holcomb Concrete Seal Cuts Scrubbing—Makes Floor Care a Mere Matter of Sweeping

This amazing Holcomb development makes concrete virtually as easy to care for as tile—saves up to 50% on maintenance costs!

Holcomb Concrete Seal speeds mopping and sweeping. Eliminates need for regular scrubbings—because dirt stays on top of the seal, not down in hard-to-reach pores.

Just one application stops surface powdering, puts an end to costly tracking and settling of dust. It prevents staining, too. Even grease can't penetrate this tough seal.

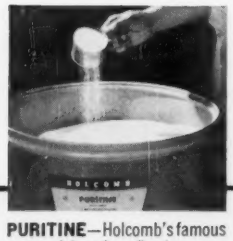
Rated anti-slip by laboratory tests, Concrete Seal is safe to use everywhere. It's clear and color-free—will never discolor floors like varnish-type seals. And it's not affected by cleansers; patches perfectly; can't chip or peel.

Your Holcombman can demonstrate savings up to 50% on maintenance of *your* concrete floors!

J. I. HOLCOMB SCIENTIFIC CLEANING MATERIALS

J. I. Holcomb Manufacturing Co., Inc. • 1601 Barth Avenue, Indianapolis

NEW YORK • DALLAS • LOS ANGELES



PURITINE—Holcomb's famous non-sudsing, free-flowing powder cleanser. Fast acting, economical. Cleans any surface washable with water.



FLOOR MACHINES—in three sizes (12", 15", 17") for every scrubbing and polishing job. Choice of Bassine Scrubbing or Tampico Polishing Brush.



"ARABIAN" FLOOR BRUSH—cuts sweeping time by getting fine, medium and coarse dirt in one stroke. A special fiber for each, all in one brush.



DUSTLESS SWEEPER—it cleans, dusts and polishes all in a single stroke. Selected cotton yarn chemically treated for fast dust pick-up. Non-slip head.



Fenestra packages hollow metal door, frame
and hardware units to save you up to $100
per opening with this . . .

NEW IDEA

Look like costly custom-made doors, don't they? They're not. They're stock doors by Fenestra®—with an installed cost about $100 *less* per opening than you'd expect to pay!

Fenestra's new idea for saving you money on school doors is really very simple. We mass produce them on special jigs that save us expensive labor. We pass along this savings to you. We maintain large stocks of standard sizes to give you fast delivery and doors come to your building complete with frames and hardware, ready to install. You don't have to cut, fit, mortise, drill or tap a Fenestra Door. *One*



REIDLAND SCHOOL, Paducah (Reidland), Ky., cost less to build because 134 Fenestra $1\frac{3}{4}$" Hollow Metal Flush Doors were used. *Architect:* G. Tandy & Lee Potter Smith, Paducah, Ky. *Contractor:* Erhart-Knopf Construction Co., Inc., Louisville, Ky.



FOR SCHOOL DOORS

man with a *screw driver* can install it *in minutes.*

Fenestra Hollow Metal Doors swing open smoothly. They close quietly because there's a sound-deadening material inside. You save, year after year, on maintenance because Fenestra Doors can't warp, swell, stick or splinter. They last a lifetime!

Illustrated are Fenestra's 1¾" Entrance Doors, 1¾" Flush Door and the NEW 1¾" *Fin-Air* Louvered Door for air-conditioned buildings—three of the many fine doors in Fenestra's complete line. Call your Fenestra representative for detailed information or mail the coupon below.

Fenestra | HOLLOW METAL DOOR • FRAME • HARDWARE UNITS

Your Single Source of Supply for
DOORS • WINDOWS • BUILDING PANELS

Fenestra
NS-3405 Griffin Street
Detroit 11, Michigan

Please send complete information on Fenestra Hollow Metal Doors

Name _____

School _____

Address _____

City _____ State _____

(*Continued From Page* 160)
it necessary" to supplement their teaching incomes with out-of-school jobs during the school year. A research committee of the Oregon Education Association reported that 54 per cent of these teachers worked nine hours or less weekly outside of school.

New Heights. More than three million students have enrolled in U.S. colleges and universities this school year, according to a report by S. M. Brownell, commissioner of education. Marking the fourth consecutive year of increase, the three million figure is 8.8 per cent more than the next highest enrollment of 2,500,000 in 1954.

Traveling Art. Some 30 pictures drawn by American children are currently being exhibited in Oslo, Norway, under the auspices of the Norwegian National Commission for UNESCO. The exhibit, which includes such pictures as "Me and My Snowman" by a 6 year old in Kansas City, Mo., and "Sliding Into Home Plate" by a junior high student in Pittsburgh is a part of the International Jubilee Exhibition by the Norwegian Association of Art Teachers.

And Up. Operating expenses in Connecticut's public schools have tripled in the last 10 years, reaching a new high of $96 million for the 1954-55 school year. School enrollments have risen concurrently from 249,300 to 363,174 in the last decade.

Needles to Fashion. Becoming stylish, the Central High School of Needle Trades in New York City has been renamed the High School of Fashion Industries. The 30 year old school which started with 75 students now has classes for more than 4000 students daily.



"It's a maintenance man's dream of a floor cleaner come true."

One application of LUSTRECLEAN on your floors:
– cleans
– deodorizes
– lightly waxes.
Figure your savings!
– in dollars
– in time
– in simplicity.

USE LUSTRECLEAN on wood, composition, rubber, cement, terrazzo, painted and unpainted surfaces.

HAVE no doubts about LUSTRECLEAN. It really cleans. Removes rubber burns. Surface mars. Creates a clean fresh atmosphere. Brings out and protects the natural beauty of your floors.

LET a WEST Floor Specialist demonstrate how LUSTRECLEAN replaces two or more materials. He'll also be glad to discuss our Floor Preservation Program. Just write. Or call your local WEST office.

OLDEST AND LARGEST COMPANY OF ITS KIND IN THE WORLD

75th ANNIVERSARY
WEST DISINFECTING Company

Branches in Principal Cities •

FREE FOLDER
Use your business letterhead to request our folder on the efficiency of LUSTRECLEAN



WEST DISINFECTING COMPANY
Dept. NS, 42-16 West St., Long Island City 1, N. Y.
In Canada: 5621-23 Casgrain Ave., Montreal

ABOUT PEOPLE

APPOINTED . . .


Lewis E. Harris

Lewis E. Harris, associate director of the School-Community Development Study at Ohio State University, to executive secretary of the newly formed Ohio School Boards Association, effective July 1. Offices of the association will be located at Columbus, Ohio. Dr. Harris was formerly superintendent of schools at Floodwood, Minn.

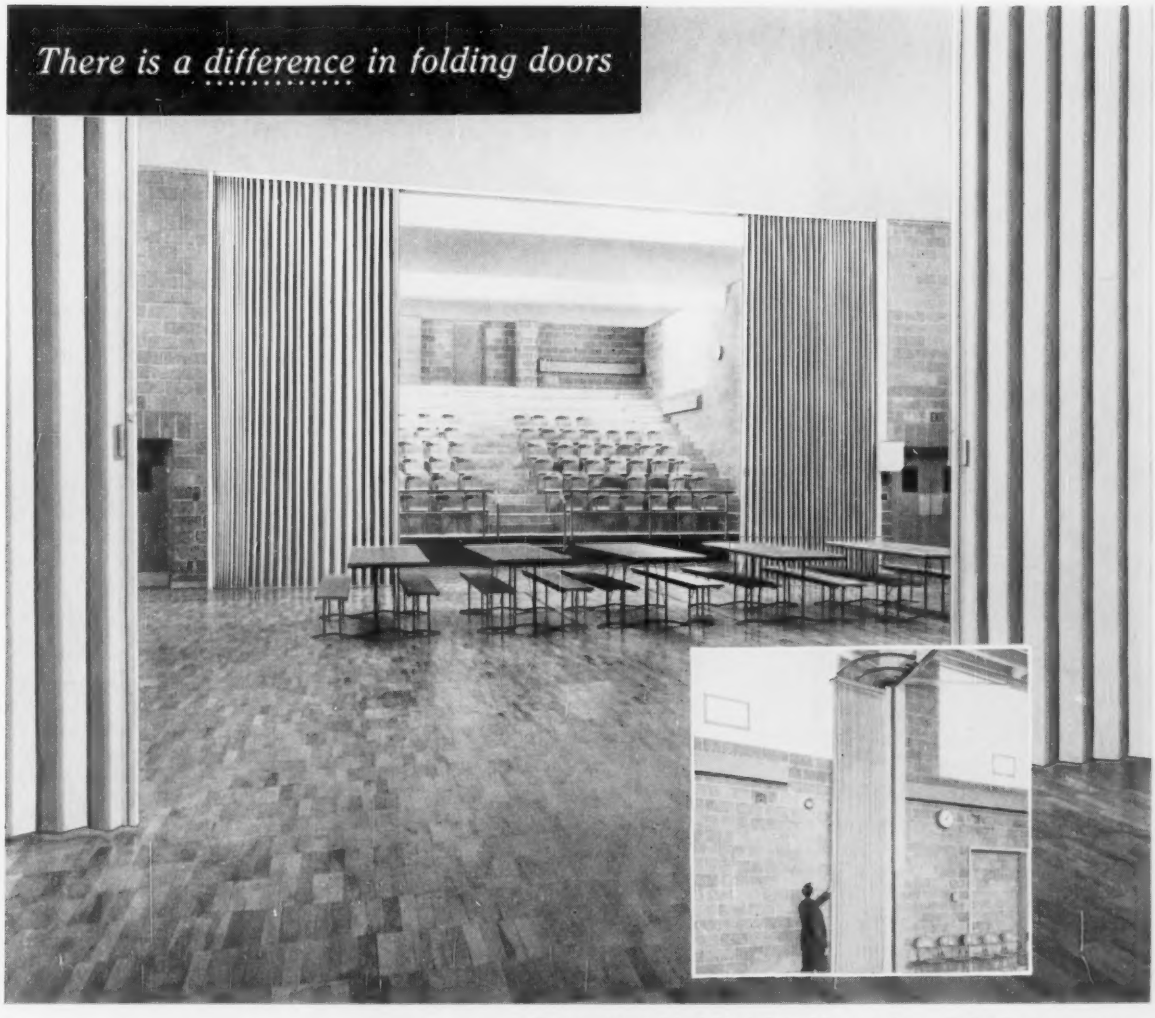
Kenneth W. Lund, director of pupil guidance in Chicago, to assistant to the general superintendent of schools, **Benjamin C. Willis.** Dr. Lund will assist with special projects in the school system and will also remain in charge of the bureau of pupil guidance.

E. H. Black, superintendent at La Marque, Tex., has had his contract renewed for the ensuing three years. At the same time it was announced that **Dave W. Williamson,** assistant superintendent in charge of business, and **L. V. McNamee,** assistant superintendent in charge of curriculum, were given contract extensions for two years.

Everett Walters, associate professor of history and assistant dean of the graduate school at Ohio State University, to acting dean of the graduate school there. He succeeds **N. Paul Hud-**

(*Continued on Page* 167)

There is a difference in folding doors



St. Timothy Church School, Maple Lake, Minn. • Architect: Shifflet, Backstrom & Carter
Contractor: F. O. Watson & Son • Inset: Stacked door pivots easily off floor

See what Foldoor does in this gym

See what folding doors can do *for you*: fast, practical room dividing; more *use and profit* from the same floor space; important economies in heat, light and maintenance . . . all without rebuilding or remodeling. When the time comes for you to investigate folding doors, be sure you get the most for your money. Investigate FOLDOOR first —and get the only folding door that is *different and better* all six ways: (1) Easier operating—without air "pockets" and with 61% less hinge friction; (2) Neater installation —track always fully concealed; (3) Better appearance— widest range of sizes and colors; (4) Greater space-saving —smallest stack space known; (5) Structural strength— the same size hinge in every door; (6) Longer life—proved in thousands of installations. Get to know your FOLDOOR Distributor, listed under "Doors" in the yellow pages.

INSTALLING DISTRIBUTORS IN ALL PRINCIPAL CITIES
In Canada: FOLDOOR OF CANADA, Montreal 26, Quebec

HOLCOMB & HOKE
FOLDOOR ®
THE SMARTEST THING IN DOORS

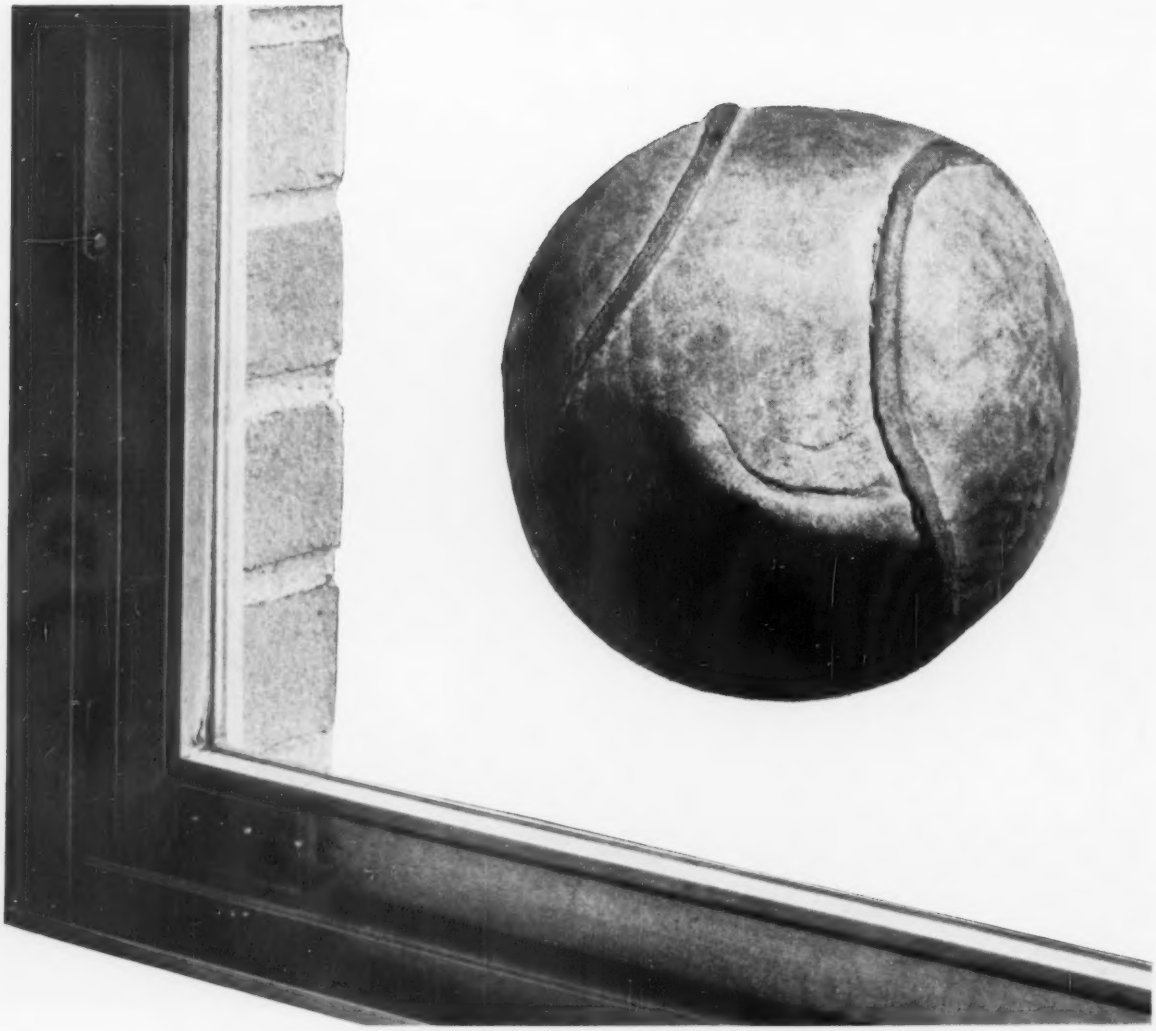
HOLCOMB & HOKE MFG. CO., INC.
1545 Van Buren St.
Indianapolis, Indiana
Please send full details on FOLDOOR

NAME _____

ADDRESS _____

CITY _____ STATE _____

E



Save maintenance money with TUF-FLEX glass!

How much does it cost *your* school each year to replace broken windows?

Many schools are glazing all windows in vulnerable spots with L·O·F *Tuf-flex** tempered plate glass. It is *3 to 5 times* stronger than regular plate glass of the same thickness.

For factual information, read the column at the right. A Libbey·Owens·Ford Glass Distributor or Dealer (listed under "Glass" in the phone book) will answer your individual questions about *Tuf-flex*. *®

L O F GLASS

TUF·FLEX GLASS

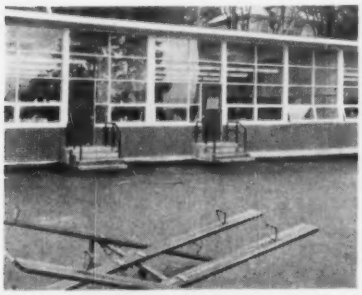
LIBBEY•OWENS•FORD *a Great Name in Glass*

TUF·FLEX FACTS

Dropped from a height of 8″, a 2-pound steel ball smashes ordinary $\frac{1}{4}$″-thick plate glass but you can drop it up to 44″ on $\frac{1}{4}$″ *Tuf-flex* without fracture. When impact is powerful enough to break it, *Tuf-flex* falls into small particles resembling bath salts.



MANY USES in addition to windows. *Tuf-flex* is being used for basketball backboards, kick plates and push plates on doors, for balustrades and railings and for enclosures for exhibits.



Ainsworth School, Portland, Ore. *Architect:* Raymond Kermit Thompson, Portland.

MANY SCHOOLS in every part of the country are insisting on *Tuf-flex* because of maintenance economy and safety. Some schools have outside corridor walls glazed with *Tuf-flex*. Many gymnasium windows are *Tuf-flex*. And many schools (like the one above) have *Tuf-flex* in classroom windows facing play areas.

For further information, write to Dept. 8936, Libbey·Owens·Ford Glass Company, 608 Madison Ave., Toledo 3, Ohio.

LIBBEY·OWENS·FORD

NEWS

(*Continued from Page* 164)

son, who resigned to return to teaching and research in the department of bacteriology at the university.

Robert J. Clemo, assistant superintendent of Tamalpais Union High School District, Tamalpais, Calif., to administrative assistant in the state division of public school administration.

Clifford C. Furnas, chancellor of the University of Buffalo, to assistant secretary of defense for research and development. He has been granted a leave of absence from the university. **Claude E. Puffer,** vice chancellor of business affairs at the university, will serve as acting chancellor.

Robert L. Goodpaster, vocational agriculture instructor at Bourbon Vocational High School, Bourbon County, Kentucky, to acting superintendent for Bourbon County, Fort Scott.

E. P. Chaudoir, principal of Devall Elementary School, West Baton Rouge, La., to superintendent of parish schools, West Baton Rouge, effective July 1. Mr. Chaudoir succeeds **Remi Lavergne,** who will begin a year's leave of absence prior to retirement in 1957.



Blanche E. Crippen

Blanche E. Crippen to professional assistant in the office of the Council of Chief State School Officers, Washington, D.C., effective February 15. She will serve as a liaison person with governmental agencies and citizen and professional organizations and conduct press, radio-television, and public relations programs for the council. Prior to her appointment, Miss Crippen was assistant director for public information for the Joint Committee on Educational Television, Washington, D.C.

Thomas C. Campbell, superintendent at Clare, Mich., to assistant superintendent at Lakeview, Mich.

Fred M. Atkinson, superintendent at Manchester, Mich., to superintendent at Utica, Mich.

Martin L. Moran, junior high school principal at Leominster, Mass., to superintendent there.

Thomas Leonard Rodes, supervisor of Bossier Parish white schools, Bossier, La., to superintendent of the parish school system there. Mr. Rodes succeeds **R. V. Kerr,** who has resigned.

Viola W. Klassen, teacher at Center Rural School, near Marion, Kan., to



Music in color

. . . is beauty in all things.

New choral robes in color sharpen the interest for all, enriches the effect, and add a sparkle to every performance.

MOORE materials, available now, in colors that remain richly colorfast for their long, fabric-life. New process, solution-dyed Chromspun® yarns, woven by Cohama Fabrics for MOORE—for ease in care, years of wear, resistance to wrinkling and easy color matching as your choir gains more members. Good news indeed, for choral groups everywhere.

Write your nearest MOORE office for catalogs and swatches. Fill out and send in the coupon below . . . mail to Department N17.



☐ *Send catalog of Robe Styles and Fabric Selector containing swatches for color and material.*

☐ *We may need approx. . . . . Robes for:*

☐ *Adults* ☐ *Children*

The color we like is . . . . . .

Delivery required by . . . . . (date)

☐ *Have representative (with samples) phone for appointment.*

E. R. MOORE CO.

932 Dakin St., Chicago 13, Ill.

268 Norman Ave., Brooklyn 22, N.Y.

1908 Beverly Blvd., Los Angeles 57, Calif.

superintendent of Marion County schools.

Sam T. Hawkes, high school principal at Spur, Tex., to superintendent at Crosbyton, Tex.

Carl D. Gum, high school principal at Gideon, Mo., to superintendent at Clarkton, Mo.

J. W. Clawson, supervising principal of Irwin-North Irwin schools, Irwin, Pa., to assistant superintendent of Westmoreland County schools, Greensburg, Pa.

RESIGNED . . .



Samuel E. Fleming

Samuel E. Fleming, superintendent in Seattle, effective in June 1956. Mr. Fleming began his 48 years of service with the Seattle system as a high school teacher. In 1922 he became assistant superintendent and in 1944 was named to the superintendency. Before going to Seattle he was a teacher in Indiana schools for two years. Mr. Fleming has been an editorial consultant for The NATION'S SCHOOLS since July 1945.

Ward G. Reeder, professor emeritus of education in the college of education at Ohio State University, after 34 years of service.

Robert R. Abernethy, superintendent of Haverford Township schools, Haverford, Pa., since 1942.

J. R. Jones, superintendent at Garden City, Kan., since 1941.

Arthur C. Jones, superintendent at Walpole, Mass., for 35 years.

Elmer J. Moore, superintendent at Shamrock, Tex., for the last 10 years.

Ora Morningstar, superintendent at Eau Claire, Mich., since 1951.

Edwin A. Garrett, superintendent at Osage City, Kan., for the last three years.

Starr M. King, superintendent at Beverly, Mass., for the last 20 years.

J. F. Gardner, superintendent at Ennis, Tex., for the last 10 years.

Fred House, superintendent at Warrensburg, Mo., since 1946.

L. E. Ziegler, president of Culver-Stockton College, Canton, Mo., effective July 1.

DIED . . .

Bertha E. Roberts, deputy superintendent in charge of elementary schools in San Francisco for 29 years, on December 15. Miss Roberts retired in 1948, having held the highest administrative position ever occupied by a woman in the San Francisco school department. She began her career in San Francisco schools in 1903 as an elementary school teacher.

Clara Savage Littledale, editor of *Parents' Magazine* since its founding in 1926, at the age of 64.

H. R. Tonning, former superintendent at Watford City, N.D., at the age of 75.

Will G. Atwood, superintendent of Warren County schools, Warren, Pa., for the last 27 years, at the age of 67.

Edwin Leroy Shepard, retired supervising principal of Collier Township schools, Collier, Pa., at the age of 69.

George M. Green, former superintendent at Pilesgrove Township, Salem County, New Jersey, at the age of 71.

Montfort Melchior, former principal of Girard College, Philadelphia, at the age of 75. Dr. Melchior had been associated with the college for 35 years before his retirement seven years ago.



HILD's new Wet and Dry Vacuum

WITH TRANSFERABLE VACUUM HEAD

fits any 55 gallon drum on hand



ECONOMICAL! Fits any 55 gallon drum!

LIGHTWEIGHT! Transferable motor unit is easily lifted from one drum to another.

PORTABLE! 4-wheel dolly available for easy moving.

The new HILD giant Industrial Vacuum Cleaner is equipped with a powerful ONE HP motor for Wet or Dry pickup. Available with 2" intake diameter hose for picking up bulky items such as lightweight waste material, shavings, rags, woodchips, metal filings, etc., or the 1½" intake diameter hose for picking up dirt, dust or liquids. Lightweight removable motor unit permits easy transfer from full drum to empty drum in seconds. No cumbersome outside filter bag to contend with. 4-wheel dolly made of steel is available for easy moving of drum and unit. Vacuum head and dolly available separately.

HILD FLOOR MACHINE CO.

740 W. Washington Blvd., Chicago 6, Illinois, U. S. A.
Factory Branches: 250 E. 43rd St. • New York 17, N. Y.
4271 West Third Street • Los Angeles 5, California


RUG & CARPET SHAMPOO MACHINE . . . with patented Shower-Feed Brush


SCRUBBERS-POLISHERS 6 Models


WET & DRY VACUUM Model 115 . . . 10 gal. cap. Also available in 6 gal. cap.—Model 106


ALL-AUTO-MATIK UPHOLSTERY SHAMPOO MACHINE


PORTABLE RUG AND CARPET BEATER


LIGHTWEIGHT, PORTABLE RUG PILE-LIFTER VACUUM


WET & DRY VACUUM Deluxe Model 106 . . . 6 gal. cap.


HEAVY DUTY WET & DRY VACUUM Model 155 . . . 55 gal.

HILD CO-ORDINATED SUPPLIES

Rug Shampoos • Upholstery Shampoos • Hild Dog-Tex Hild Re-Color • Spotting Compound, Waxes, Cleaners Floor Sealers

HILD FLOOR MACHINE CO.
740 W. Washington Blvd.
Chicago 6, Illinois

Gentlemen: Please send, without cost or obligation:

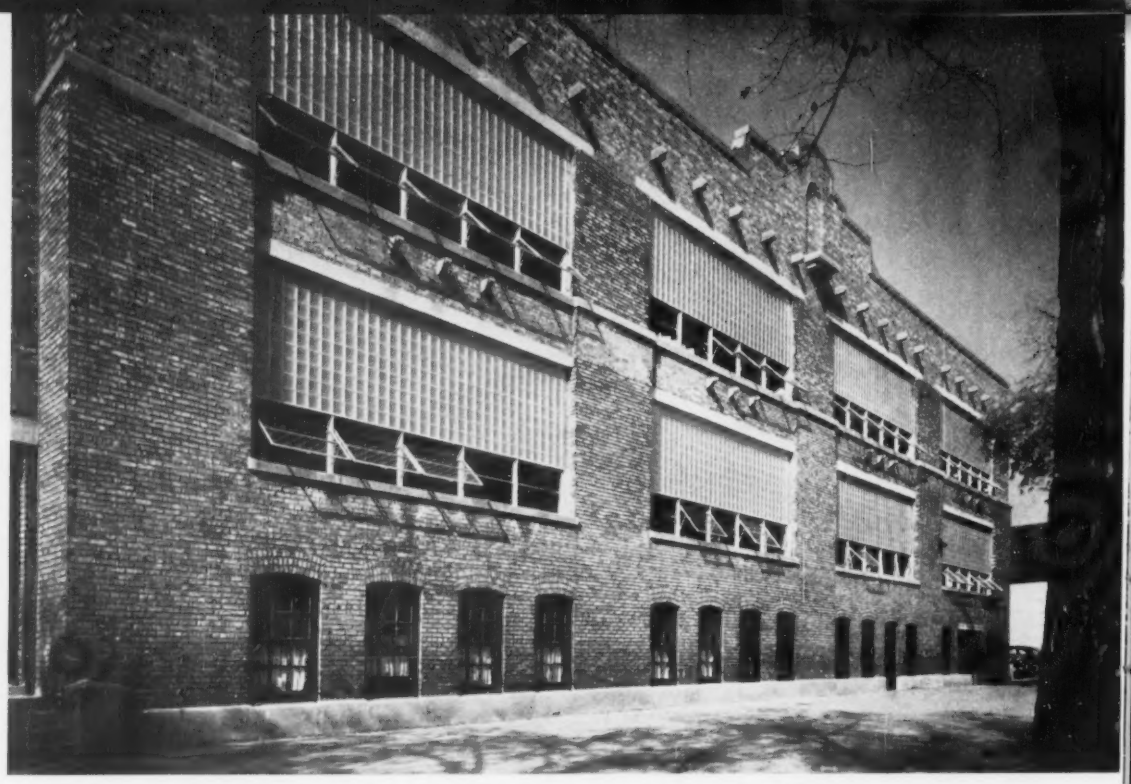
- ☐ Prices on HILD Re-Color.
- ☐ Prices on HILD equipment for rug, carpet and upholstery shampooing.
- ☐ Prices on HILD Cleaning Materials.
- ☐ Send Me HILD Sales Aids.

NAME_____

COMPANY_____

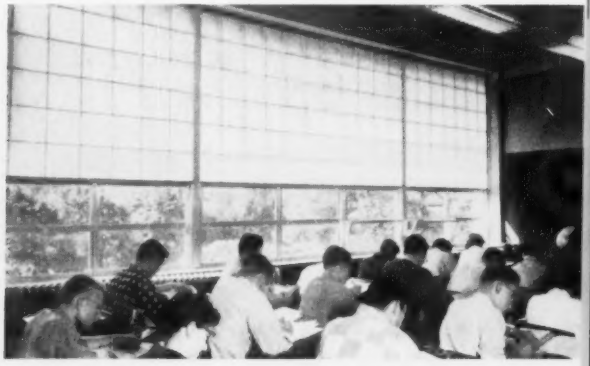
ADDRESS_____

CITY_____ ZONE____ STATE____ NS-3-56

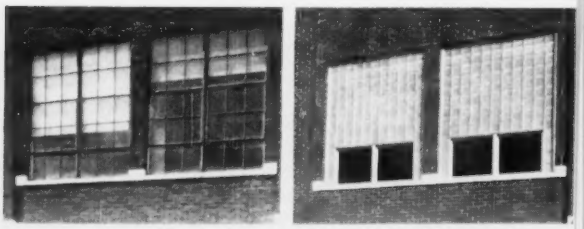


"NO MAINTENANCE PROBLEMS," says Fr. John Ferring, St. Margaret Mary School, Chicago, *seven years* after replacing old windows with glass block. "We're very happy with the results. Glass block have given our school a modern look and improved daytime lighting. There have been no maintenance problems whatsoever."

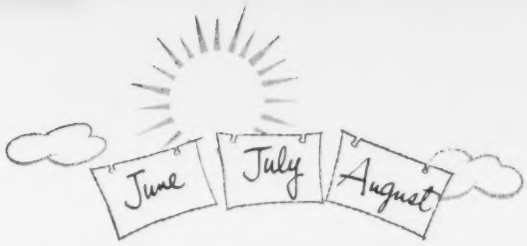




"REMARKABLE IMPROVEMENT," says W. L. Jefferson, supt. of schools, New Kensington, Pa. (Interior of school above, exterior at left.) "From the standpoint of insulation, appearance, better light distribution and ventilation, our new glass block windows made a remarkable improvement . . . Everyone is delighted with the job."



BEFORE AND AFTER close-up look at an actual sash replacement is shown here. Rusting window sash were replaced with glass block, eliminating painting, old-fashioned shades and high fuel bills.



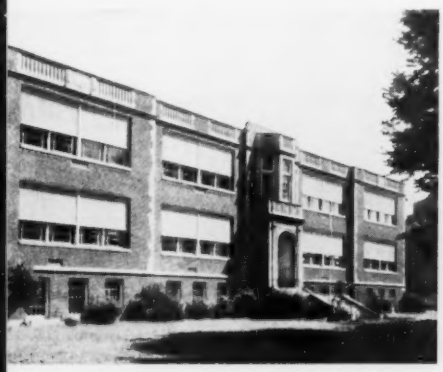
Plan now for summer modernization

SAVE MONEY... BEAUTIFY YOUR SCHOOL WITH OWENS-ILLINOIS GLASS BLOCK

Hundreds of school administrators across the country have found that replacing worn-out windows with Owens-Illinois Glass Block offers these advantages:

1. No window sash rotting and rusting
2. Lower fuel and light bills
3. Better daylighting
4. Less window breakage
5. Modern appearance
6. Better ventilation

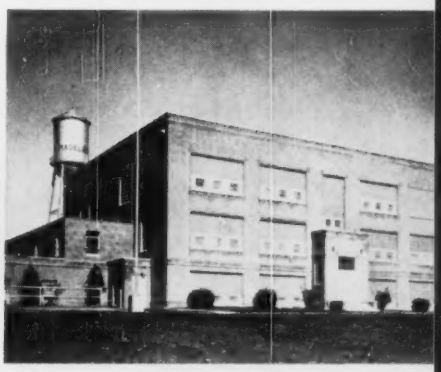
Read how these advantages of glass block have helped administrators of the typical schools, pictured here, save maintenance money and, at the same time, beautify their schools.



NO RUSTING OR ROTTING can occur when you replace worn-out sash with glass block. See how modern-looking this old school in Springfield, Ohio, has become merely by using glass block.



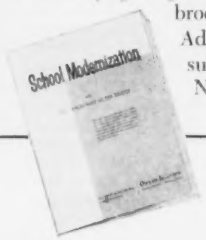
"BETTER LIGHT, LESS BREAKAGE," says Ass't Supt. of Schools Edward L. Murdock, Highland Park, Michigan, referring to glass block modernizing in this school, built in 1917.

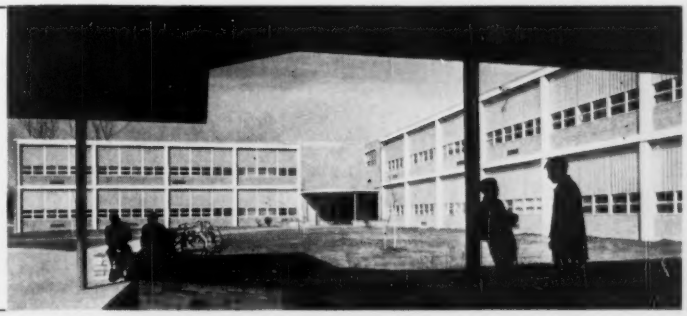


"EASIER, CHEAPER TO HEAT," says Supt. J. R. Jansen, Madelia, Minn. "Our school is easier to heat, retains temperature longer. This means a savings in heat costs."

Give your old school a "look" as modern as this new school in Arlington County, Va., by remodeling this summer with Owens-Illinois Glass Block.

For complete information on the money-saving benefits of this daylighting material, write today for our new brochure on School Modernization. Address: Kimble Glass Company, subsidiary of Owens-Illinois, Dept. NS-3, Box 1035, Toledo 1, Ohio.





OWENS-ILLINOIS GLASS BLOCK
AN (O) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES · TOLEDO 1, OHIO

THE BOOKSHELF

Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

Cooperative Program in Educational Administration, Middle Atlantic Region: Report of a Five-Year Project. Vol. I, a narrative report pp. 123; Vol. II, summaries of individual projects and statistical data, pp. 117. Teachers College, Columbia University, New York.

School Business Administration. Edited by Henry H. Linn, professor of education, Teachers College, Columbia University. The Ronald Press Co., 15 E. 26th St., New York. Pp. 574. $7.50.

Administrative Leadership in the Elementary School. By Hanne J. Hicks, professor of education, Indiana University. The Ronald Press Company, 15 E. 26th St., New York. Pp. 456. $5.

Handbook on Attendance Accounting in California Public Schools. 1955 Edition. Compiled by E. R. Deering, consultant, child welfare and attendance, California State Department of Education, Sacramento. Pp. 109.

The New Teacher Comes to School. By Glen G. Eye, professor of education and director of student teaching and laboratory schools, University of Wisconsin, and Willard R. Lane, assistant professor of education, University of Minnesota. A guide to orientation programs for new teachers and discussion of the problems they face. Harper & Bros., 49 E. 33d St., New York. Pp. 376. $4.50.

Clerical and Custodial Staff in Public Secondary Day Schools. Circular No. 445. By Ellsworth Tompkins, acting chief, secondary schools section, and Mabel C. Rice, supervisory survey statistician, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 83. 55 cents.

An Experiment in Teaching Educational Administration. By Howard Eckel, associate professor of education, University of Kentucky. Bulletin of the Bureau of School Service, Vol. 28, No. 1. College of Education, University of Kentucky, Lexington. Pp. 55. $1.

ADULT EDUCATION

Professional Standards for Adult Education Administrators. Prepared by the California Association of Adult Education Administrators in cooperation with the Bureau of Adult Education. California State Department of Education, Sacramento. Pp. 19.

AUDIO-VISUAL

Audio-Visual Procedures in Teaching. By Lester B. Sands, professor of education, Santa Barbara College, University of California. The Ronald Press Co., 15 E. 26th St., New York. Pp. 670. $6.

U.S. Government Films for Public Educational Use. Bulletin 1955, No. 1. By Seerley Reid, chief, visual education service, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 651. $1.75.

COMMUNITY PLANNING

Planning School-Community Swimming Pools. By Louis E. Means, consultant in school recreation, bureau of health education, physical education, and recreation, and Charles D. Gibson, supervising field representative, school planning, California State Department of Education, Sacramento. Pp. 58.

CURRICULUM

Arithmetic and Reading, Yesterday and Today. Statistical comparison of standards in public schools in St. Catherines, Canada, 1933-38 and 1952-54. By Hugh R. Partlow, inspector of public schools, St. Catherines. The Copp Clark Co., Ltd., Vancouver, B.C. Pp. 151.

Living in Our America. By I. James Quillen, dean of education, Stanford University, and Edward Krug, University of Wisconsin. For seventh and eighth grade American history courses. Scott, Foresman and Co., 433 E. Erie St., Chicago. Pp. 704. $4.16.

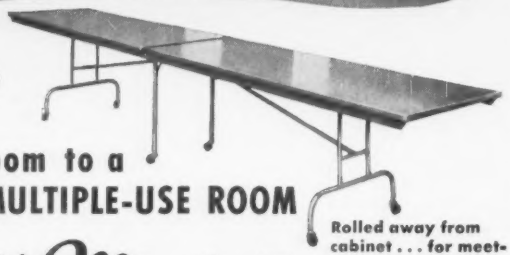
Our Natural Resources—and Their Conservation. Public Affairs Pamphlet No. 230. By Richard L. Neuberger. Public Affairs Committee, 22 E. 38th St., New York. Pp. 28. 25 cents.

Felt Boards for Teaching. By Charles H. Dent, associate professor of curriculum and instruction, and Ernest F. Tieman, director, visual instruction bureau, University of Texas. Visual Instruction Bureau, University of Texas, Austin 12. Pp. 26.

Framework for Family Life Education. A survey of present-day activities in sex education. By Frances Bruce Strain, author and lecturer in family life education, and Chester Lee Eggert, professor of school administration and field services, University of Florida. Bulletin of the National Asso-



Convert your single-purpose gymnasium, hall or classroom to a CAFETERIUM, MULTIPLE-USE ROOM



Rolled away from cabinet . . . for meetings, banquets etc.

Left attached to cabinet . . . for lunches, arts, crafts etc.

with Mitchell TABLES and BENCHES FOLD-O-LEG Doubler

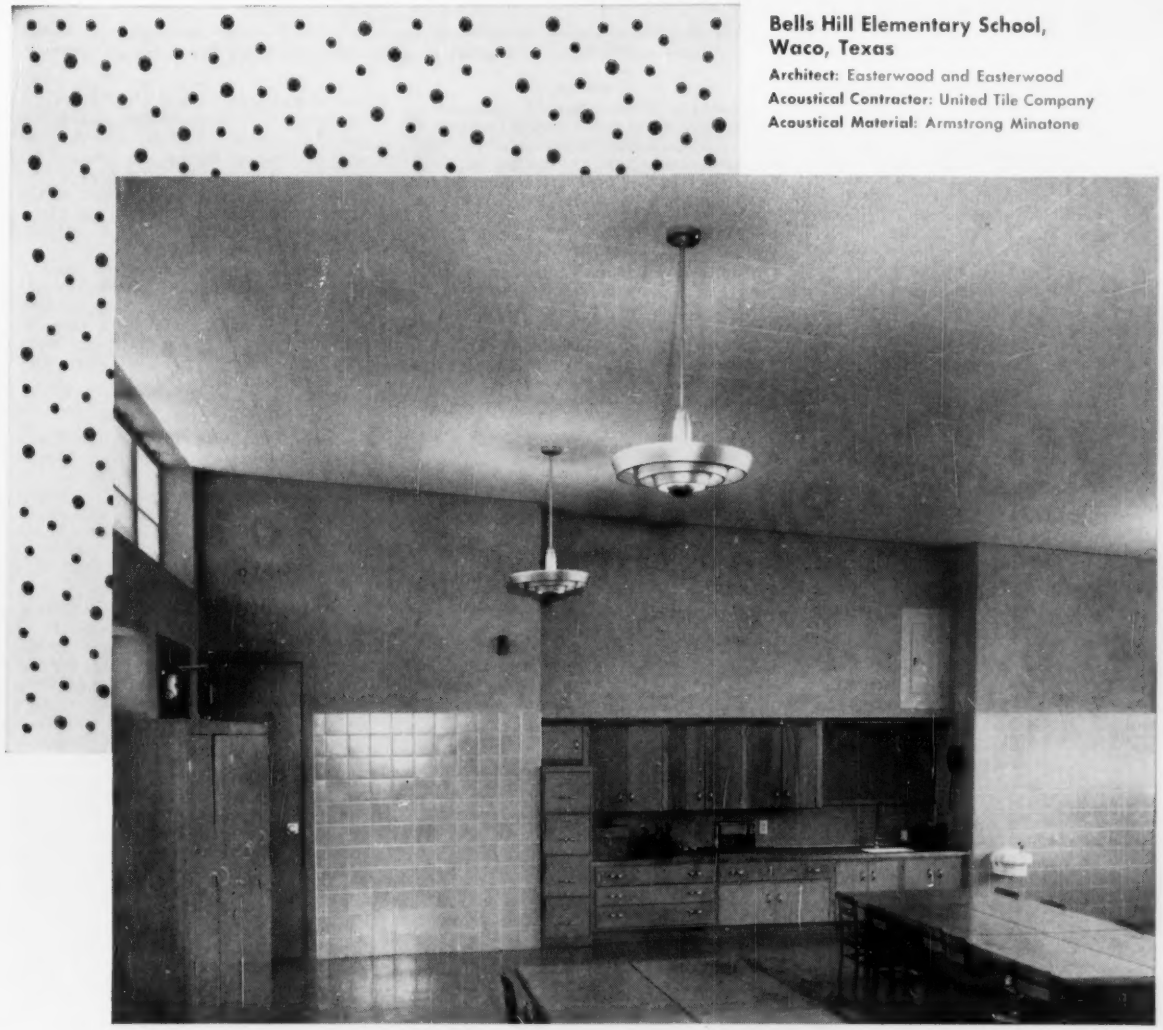


Versatile, safe, mobile units that seat 20 children or 18 adults in knee-free, uncrowded comfort. The shallow all-steel wall cabinet can be recessed-in-the-wall in major remodeling and new buildings or placed against-the-wall in existing rooms. Tops of Linoleum, Resilyte or Formica plastics. Tubular steel legs. Simple, easy-to-operate folding mechanism. Overall cabinet size: 7′ 2″ high, 5′ 4″ wide, 6½″ deep. Doubler Table . . 13′ 10″ long, 30″ wide, 29″ high. Benches . . 13′ 10″ long, 12″ wide, 18″ high. Also made with one or two tables only or two tables and four benches.

Write for Illustrated Folder and Specifications

MITCHELL MANUFACTURING COMPANY
2734 S. 34th STREET MILWAUKEE 46, WISCONSIN

MFRS. of MITCHELL FOLD-O-LEG TABLES, BAND AND CHORAL STANDS, SEATING RISERS



Bells Hill Elementary School, Waco, Texas

Architect: Easterwood and Easterwood
Acoustical Contractor: United Tile Company
Acoustical Material: Armstrong Minatone

This ceiling muffles noise . . . simplifies maintenance

Ceilings of Armstrong Minatone in the Bells Hill School, Waco, Texas, solve two important problems. First, Minatone soaks up unwanted noise, helping provide the quiet atmosphere so necessary to classroom concentration. Second, and equally important, Minatone is easy to clean.

Dust and grime will not readily cling to Minatone's smooth, two-coat white paint finish. An occasional cleaning with a damp cloth or vacuum keeps it good looking for many years. Minatone can also be repainted frequently without losing its acoustical efficiency.

Highly efficient . . . Sound doesn't get a chance to build into annoying racket under a Minatone ceiling. Minatone soaks up as much as 75% of the noise that strikes it, assuring comfortable quiet at all times.

Completely fireproof . . . Made of mineral wool fibers, Minatone is rated completely incombustible. It adds an extra measure of fire-safety and meets the strictest fire codes.

Smartly attractive . . . Minatone's Full Random perforation pattern adds modern beauty to any area, helps eliminate the institutional look so common in many schools.

Get full details on Minatone and the entire line of Armstrong sound-conditioning materials from your Armstrong Acoustical Contractor. For your free copy of the new booklet, "Quiet at Work," write Armstrong Cork Company, 4203 Wabank Ave., Lancaster, Pa.



Armstrong

ACOUSTICAL MATERIALS

Cushiontone® • Travertone* • Crestone* • Minatone®
Arrestone® • Corkoustic® • Perforated Asbestos Board

* TRADE-MARK

THE BOOKSHELF

Printed publications of interest to school administrators are listed as received.

ciation of Secondary-School Principals, Vol. 39, No. 215. N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 172. $1.50.

DIRECTORIES

Hammond's Ambassador World Atlas. Includes 326 maps—241 in full color, 85 large-scale inserts. C. S. Hammond & Company, Maplewood, N.J. Pp. 416. $12.50.

ETHICS

Opinions of the Committee on Professional Ethics. (With code of professional ethics annotated and an analysis of the functions of the committee.) N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 72. 25 cents.

FINANCE

Financing of Education. A comparative study of 55 countries. UNESCO publication No. 163. Columbia University Press, 2960 Broadway, New York 27. Pp. 286. $2.

Alfred P. Sloan Foundation, Inc. Report for 1953-54. 30 Rockefeller Plaza, New York 20. Pp. 127.

GUIDANCE

Guidance in Vocational High Schools. Curriculum Bulletin, 1954-55. Series No. 2. Board of Education of the City of New York. Pp. 56.

What to Read: Guide of Occupational Bibliographies. Second edition, revised. By Robert Shosteck, national director of research, B'nai B'rith Vocational Service Bureau, Washington 5, D.C. Pp. 180.

Educational Testing Service. Annual report to the board of trustees, 1954-55. Educational Testing Service, 20 Nassau St., Princeton, N.J. Pp. 140.

Psychologists in Action. Public Affairs Pamphlet No. 229. By Elizabeth Ogg. Public Affairs Committee, Inc., 22 E. 38th St., New York. Pp. 28. 25 cents.

120 Readings in Guidance. By Dean C. Andrew, director, counseling center, Southern State College, Magnolia, Ark., and Lester N. Downing, department of personnel and guidance, Brigham Young University, Provo, Utah. University of Nebraska Press, Lincoln 8. Pp. 341. $3.50.

HIGHER EDUCATION

Action Under Way to Meet the Rising Tide of Enrollment in American Colleges and Universities. Reports on activities and plans of various states relative to higher education. American Council on Education, 1785 Massachusetts Ave., N.W., Washington 6, D.C. Pp. 36.

HUMAN RELATIONS

Anti-Defamation League of B'nai B'rith: **Trends in Human Relations Research,** by Charles Winick, pp. 48, 40 cents. **Primer on Communism,** pp. 87, 50 cents. **Current Problems in Human Relations Education,** proceedings of the National Conference on Human Relations Education, New York, 1955, pp. 70, $1. **The Jews in American History,** edited by Jacob I. Hartstein, dean of graduate school, Long Island University, pp. 100, $1.25. **Little Stories on Big Subjects,** stories to foster intergroup understanding for 7 to 12 year olds, seven booklets, $1. Anti-Defamation League of B'nai B'rith, 515 Madison Ave., New York.

LIBRARY

Subject and Title Index to Short Stories for Children. Indexing of more than 5000 stories which appear in various collections. Compiled by a subcommittee of the American Library Association Editorial Committee. American Library Association, 50 E. Huron, Chicago. Pp. 344. $5.

IN OTHER COUNTRIES

Education in France. Editions France Actuelle, 1956. Comite France Actuelle, 221 Southern Building, Washington, D.C. Pp. 26. 25 cents.

MAINTENANCE

ASTM Standards on Soaps and Other Detergents. (With related information.) American Society for Testing Materials, 1916 Race St., Philadelphia 3. Pp. 176. $2.50.

PERSONNEL

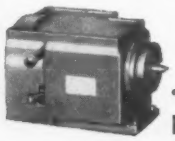
A Manual on Certification Requirements for School Personnel. 1955 edition. Prepared by W. Earl Armstrong, director, National Council for Accreditation of Teacher Education, and T. M. Stinnett, executive secretary, National Commission on Teacher Education and Professional Standards. N.E.A., 1201 16th St., N.W., Washington 6, D.C. Pp. 176. $2.

PUBLIC RELATIONS

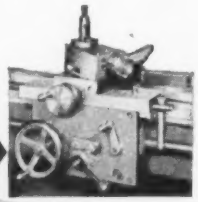
Helping Children Get Along in School. By Bess Goodykoontz, director, comparative education, division of international education, U.S. Office of Education. Science Research Associates, 57 W. Grand Ave., Chicago. Pp. 48. 50 cents.

(*Continued on Page* 176)

from its big ball-bearing spindle . . . .



. . . . to the precision carriage . . . .



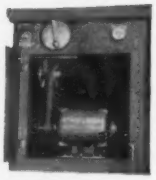
along its rugged, accurate bed . . . .



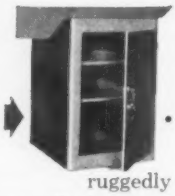
to the tailstock . .



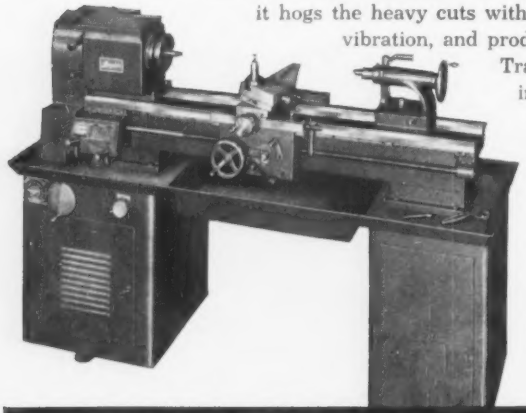
. . . . and down to the variable speed drive . . .



and its solid, strong, convenient cabinet



. . . . the No. 6560 Logan 14" Lathe is ruggedly proportioned, precision built and dynamically balanced. Its superiority is evident as it hogs the heavy cuts with almost no perceptible vibration, and produces precision results. Trains the student on an industrial lathe. At your Logan dealer's. Write for Bulletin 14-L.



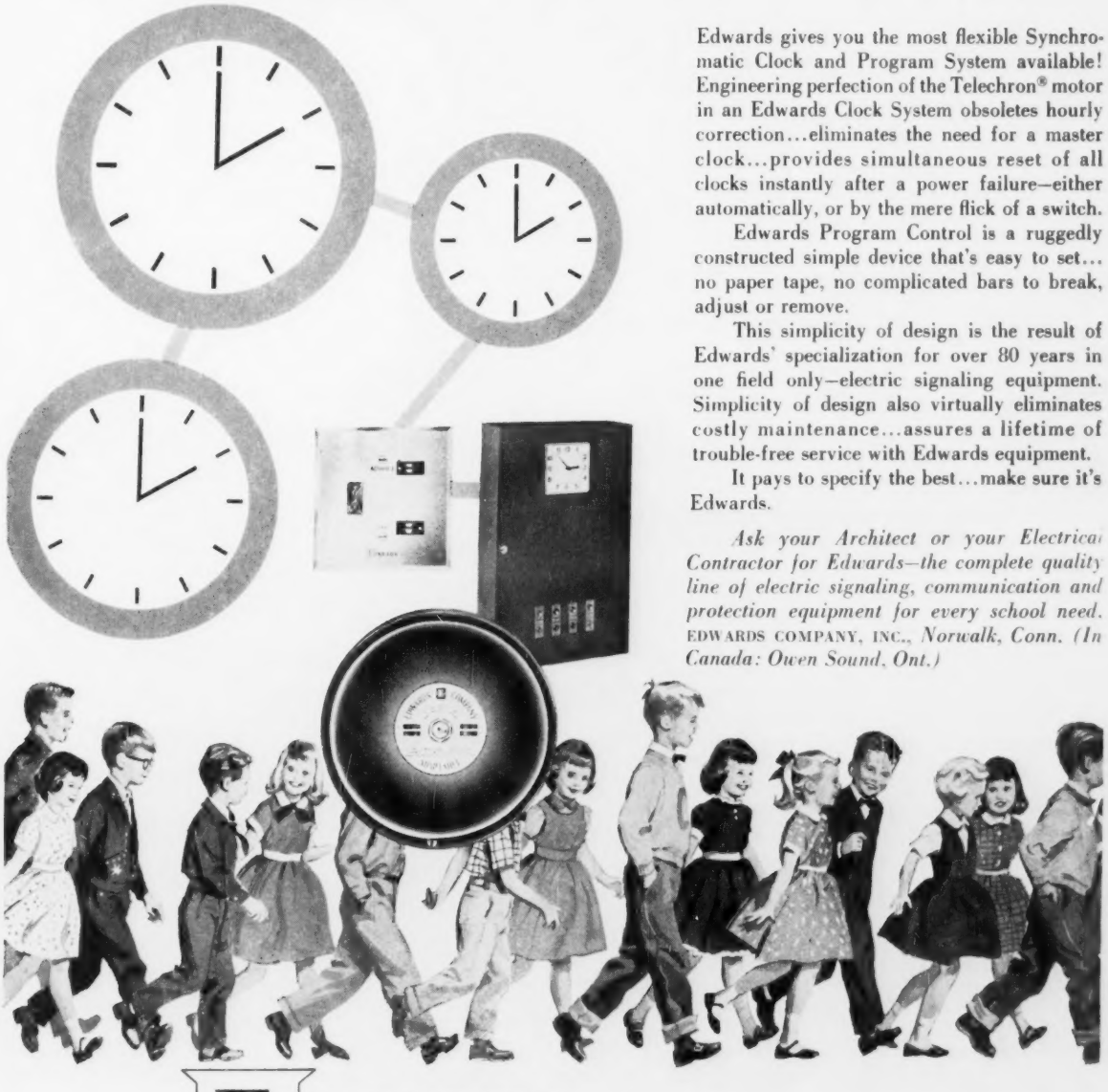
SPECIFICATIONS AND FEATURES

14⅝" swing over bed
9" swing over saddle
1⅜" spindle hole
1" collet capacity
40" between centers
Variable Speed Drive
Ball Bearing Spindle
38 to 1200 rpm

LOGAN ENGINEERING CO.
4901 WEST LAWRENCE AVENUE • CHICAGO 30, ILLINOIS

Make sure it's a "once-in-a-lifetime" installation with an

EDWARDS CLOCK and PROGRAM SYSTEM



Edwards gives you the most flexible Synchromatic Clock and Program System available! Engineering perfection of the Telechron® motor in an Edwards Clock System obsoletes hourly correction...eliminates the need for a master clock...provides simultaneous reset of all clocks instantly after a power failure—either automatically, or by the mere flick of a switch.

Edwards Program Control is a ruggedly constructed simple device that's easy to set... no paper tape, no complicated bars to break, adjust or remove.

This simplicity of design is the result of Edwards' specialization for over 80 years in one field only—electric signaling equipment. Simplicity of design also virtually eliminates costly maintenance...assures a lifetime of trouble-free service with Edwards equipment.

It pays to specify the best...make sure it's Edwards.

Ask your Architect or your Electrical Contractor for Edwards—the complete quality line of electric signaling, communication and protection equipment for every school need. EDWARDS COMPANY, INC., *Norwalk, Conn. (In Canada: Owen Sound, Ont.)*

EDWARDS *Specialists in signaling since 1872*

DESIGN • DEVELOPMENT • MANUFACTURE

THE BOOKSHELF

(*Continued From Page 174*)

Don't Discount Dad. Key Series No. 1. By Beatrice M. Gudridge. National Public Relations Association, 1201 16th St., N.W., Washington 6, D.C. Pp. 5. 10 cents.

RESEARCH

Gulf School Research Development Association publications: **Appraising Public Attitudes Toward Public Schools** (interview and survey methods). By Wallace H. Strevell. Pp. 19. $1.50. **Educational Production at Three Cost Levels.** By James T. Griffis. Pp. 27. 50¢. **Function and Status of School Superintendent.** By Lester S. Richardson. Pp. 55. $1. **Methods and Costs of Property Assessment and Collection of Delinquent School Taxes.** By John M. Moorman and Lester S. Richardson. Pp. 22. $1. **The Slow Learner.** An annotated bibliography, prepared by William S. Lane. Pp. 17. Gulf School Research Development Association, 3801 Cullen Blvd., Houston 4, Tex.

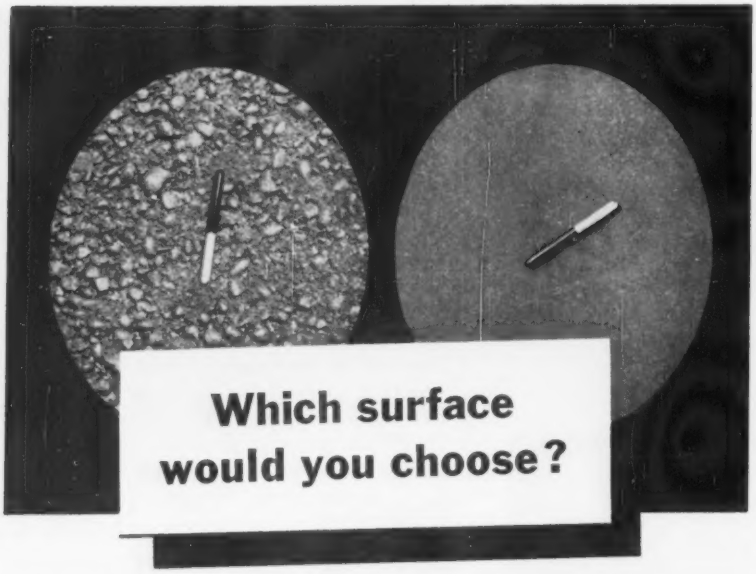
TEACHER EDUCATION

Teacher Education and Religion Project: Report on National Conference and Workshop, September 1955. Project Headquarters, American Association of Colleges for Teacher Education, 1701 S. Broadway, Pittsburg, Kan. Pp. 67.

FROM SCHOOL DISTRICTS

25th Anniversary Annual Report. Sewanhaka High School, Floral Park, N.Y. Pp. 40.

Here's How: Tested Teaching Techniques. Roslyn Public Schools, Roslyn, N.Y. PP. 86.



HERE are close-up photographs of the actual surface of a typical playyard before and after sealing with Walk-Top.® Notice the change from gritty, abrasive, coarse texture to a resilient, smooth and non-skid surface. Which surface would you choose for your play area? There isn't much doubt that you would select the Walk-Top surface . . . particularly when you discover how economically it can be applied over any existing paved area.

Get full details from our nearest office.



Walk-Top smooth, all-weather surfaces give you more "play-days" per year.

American Bitumuls & Asphalt Company

200 Bush Street, San Francisco 20, Calif. • Perth Amboy, N. J. • Baltimore 3, Md.
Mobile, Ala. • Cincinnati 38, Ohio • Columbus 15, Ohio • Tucson, Ariz.
Seattle, Wash. • Baton Rouge 2, La. • St. Louis 17, Mo. • Inglewood, Calif.
Oakland 1, Calif. • Portland 7, Ore. • Washington 5, D. C. • San Juan 23, P. R.

COMING EVENTS

MARCH

5-7. Association for Higher Education, N.E.A., annual conference, Chicago.

7-10. Department of Elementary School Principals, N.E.A., annual meeting, Denver.

12-17. Department of Audio-Visual Instruction, N.E.A., national convention, Detroit.

14-17. National Science Teachers Association, fourth national convention, Washington, D.C.

19-23. Association for Supervision and Curriculum Development, N.E.A., New York.

22-25. National Association of Deans of Women, N.E.A., national convention, Cincinnati.

25-30. American Association for Health, Physical Education and Recreation, jointly with Midwest Regional Conference, N.E.A., national convention, Chicago.

25-29. American Personnel and Guidance Association, annual convention, Washington, D.C.

APRIL

1-6. Association for Childhood Education International, 1956 Study Conference, Washington, D.C.

5-7. Southeastern Association of School Business Officials, fifth annual convention, Louisville, Ky.

8-10. Midwest Regional Drive-In, jointly sponsored by American Association of School Administrators and N.E.A. Department of Rural Education, Omaha, Neb.

10-14. International Council for Exceptional Children, N.E.A., international conference, Minneapolis.

15-17. Southwest Regional Drive-In, jointly sponsored by American Association of School Administrators and N.E.A. Department of Rural Education, New Orleans.

MAY

11, 12. International Reading Association, Morrison Hotel, Chicago.

20-23. National Congress of Parents and Teachers, 60th annual convention, San Francisco.

JUNE

17-21. National Association of Student Councils of the National Association of Secondary-School Principals, N.E.A., 20th annual national conference, Toledo, Ohio.

JULY

1-7. National Education Association, 94th annual meeting, Portland, Ore.

2-5. National School Public Relations Association, N.E.A., 21st annual meeting, Portland, Ore.

9-14. National School Public Relations Association, public relations seminar, San Francisco.

20-25. National Audio-Visual Convention, Chicago.

AUGUST

26-31. National Conference of Professors of Educational Administration, 10th annual meeting, University of Arkansas.

OCTOBER

14-17. County and Rural Area Superintendents, N.E.A., 11th national conference, Atlanta, Ga.

NOVEMBER

11-17. American Education Week.

Easy on the eyes...

...EASY ON THE BUDGET!

The need for good lighting in today's schools is as inflexible as today's school budgets. It's as unwise to compromise with the *quality* of lighting as it is impossible to increase a rigid construction budget.



Smithcraft EYE-Q
two-light all-steel louvered fixtures.



Smithcraft FEDERAL
two-light all-steel or plastic-sided louvered fixtures.



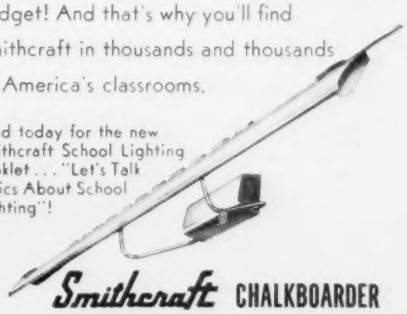
Smithcraft MERCURY
two-, three-, or four-light all-steel louvered fixture.



Smithcraft SHERATON
two-or four-light plastic-sided louvered fixtures.

Under these conditions, the lighting of school classrooms represents a design and production problem that Smithcraft is proud to have solved. The lighting fixtures illustrated on this page meet ideally the six Basic Factors of School Lighting: Economy, Efficiency, Ease of Installation, Ease of Maintenance, Appearance and Safety. These factors are your guide to the best in lighting at costs well within the most stringent budget! And that's why you'll find Smithcraft in thousands and thousands of America's classrooms.

Send today for the new Smithcraft School Lighting Booklet . . . "Let's Talk Basics About School Lighting"!



Smithcraft CHALKBOARDER
specifically designed for proper illumination of chalkboard, bulletin boards, etc.

Smithcraft
LIGHTING DIVISION
CHELSEA 50, MASSACHUSETTS
America's finest fluorescent lighting

ALL-NEW FOR MODERN SCHOOL ADMINISTRATION



Rauland MODEL S224 LOW COST

Intercommunication System

2-Way Communication and Program Facilities

- ✶ For up to 48 rooms
- ✶ "All Call" feature
- ✶ Volume level indicator
- ✶ Remote mike operation
- ✶ Matching radio and phonograph available

This compact, precision-built system is ideal for low-cost 2-way communication facilities to provide efficient supervision of all school activities. Announcements, speeches and voice messages can be made by microphone to any or all rooms (up to a total of 48); speech origination from any room to the central cabinet is available. Includes "All-Call" feature for simple instantaneous operation. Incorporates 30-watt amplifier with input connections for remote microphone, radio, phonograph and tape recorder. Housed in a compact, attractive all-steel blue-gray cabinet suitable for desk or table. When combined with the S404 matching radio-phonograph (see below), a complete centralized school sound system with unusual flexibility and utility is achieved at remarkably low cost, within the budget means of even the smallest school.

MATCHING S404 RADIO & PHONOGRAPH



Combines perfectly with the S224 system. Provides complete facilities for the distribution and control of radio and phonograph programs. Includes precision-built FM-AM radio tuner and high quality 3-speed record player which plays all records up to 12" at 33⅓, 45 and 78 rpm speeds. The matching S404 and S224 units may be stacked compactly to conserve desk space. Together, they form a complete and versatile sound system offering both communication and program facilities at the most moderate cost.

WRITE FOR COMPLETE DETAILED DESCRIPTION

RAULAND-BORG CORPORATION

Rauland-Borg Corporation
3515-N West Addison St., Chicago 18, Ill.
Send full details on RAULAND School Sound Systems. We have .....classrooms.

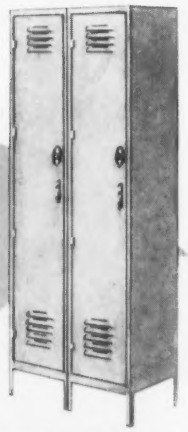
Name.....Title.....

School.....

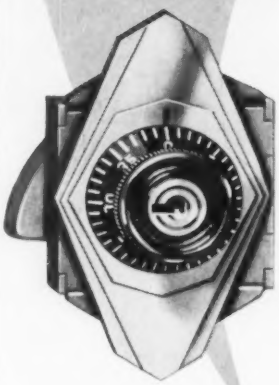
Address.....

City.....Zone.....State.....

leading locker manufacturers select



NATIONAL LOCK



built-in combination Locks

for dependable locker security

Soundly engineered, ruggedly made, National Lock built-in Combination Locks assure positive locker security. Three-number dialing... special self-locking feature (combination is disarranged when door is closed) . . . easy-to-read dial . . . all mean convenience in use and troublefree service. Leading locker manufacturers look to National Lock... make certain you specify these superior locks on the new lockers you buy. Available with or without masterkey feature.

EFFICIENT LOCKER CONTROL

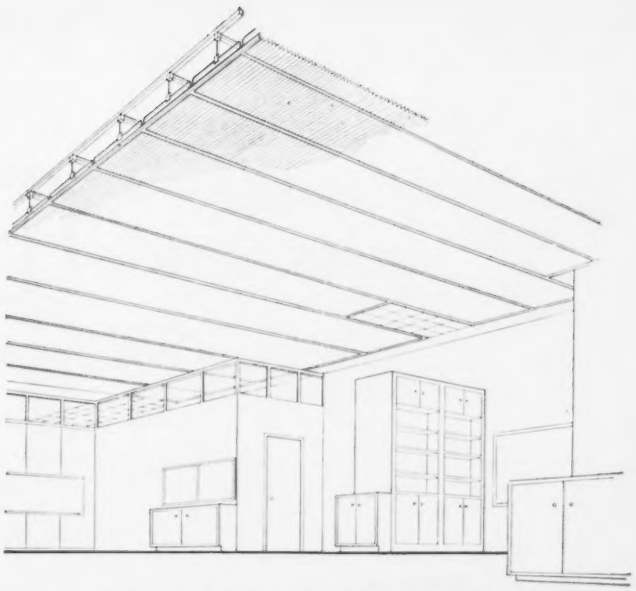
Master charts for lock records, complete with leatherette binder, are supplied FREE with quantity lock purchases. Ask about them.



write on your letterhead for a free sample lock

NATIONAL LOCK COMPANY
Rockford, Illinois • Lock Division

At last a
flexible lighting system
to meet all the
needs of modern
classrooms

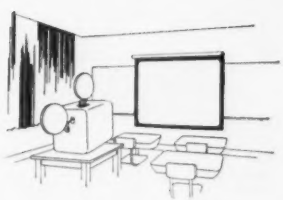


WAKEFIELD PHOTO-METRICS

GIVE THE ROOM PLANNER COMPLETE CONTROL OF THE LIGHT-DISTRIBUTION PATTERN REGARDLESS OF THE SIZE, SHAPE OR IRREGULARITY OF THE ROOM.

NO SIDE WALL CONTACT. Unlike standard luminous ceilings, Wakefield Photo-Metrics can be up to 30 inches from the side walls without affecting the light-distribution pattern. This saves the cost of exact fitting of diffusers and grids to walls, to structural members or to special equipment.

IRREGULAR PERIMETERS NO PROBLEM. In addition to pre-planned and packaged Photo-Metrics for standard rectangular classrooms, minimum Design Units in 3′x4′, 3′x6′ and 3′x8′ are available. Thus alcoves and other special areas are no problem. The designer can lay out his Photo-Metrics to follow the perimeter of his classroom, even carrying the diffuser over the tops of movable walls.



SELECTIVE SWITCHING FOR AUDIO-VISUAL. "Dim-outs" rather than black-outs are needed for classroom projection. To reduce room brightness to screen brightness, you need large area, diffuse light sources such as Wakefield Photo-Metrics, which through selective switching can lower the quantity of light without altering its over-all distribution pattern.



WAKEFIELD PHOTO-METRICS

are flexible, economical, easy to install

They consist of highly diffusing corrugated plastic panels of a specially formulated vinyl chloride, known as Wākon, suspended below a flexible fluorescent lighting system. The Wākon diffusers, which are non-combustible, are mounted in a free-suspended but rigidly locked grid which can be readily assembled to meet the lighting requirements and fit the structural limitations of various proportioned classrooms.

Told here are several of the basic advantages of Wakefield Photo-Metrics for modern classroom planning. Many others are described and illustrated in our new 40-page booklet called, WAKEFIELD LIGHTING: AS FLEXIBLE AS YOUR CLASSROOMS. Write for one to The Wakefield Company, Vermilion, Ohio. In Canada: Wakefield Lighting Limited, London, Ontario.

THE WAKEFIELD COMPANY
VERMILION, OHIO

WAKEFIELD LIGHTING LIMITED
LONDON, ONTARIO



How would you grade yourself in these important subjects?

REPORT CARD
FOR SCHOOL EXECUTIVES

STUDENT HEALTH	?
WASHROOM SANITATION	?

Straubel

TOWELS and TISSUES insure the highest ratings in health and sanitation



For the *best* in sanitation facilities — the *best* in student health protection, standardize on Straubel Washroom products and *be sure!* **STRAUBEL TISSUES** with their superior absorption drying qualities and wet strength features cost no more than competitive grades — yet *save* you more because fewer tissues are required. Full label banding keeps them free from dust and dirt in storage. Interfolded and roll types to meet every budget — fit all dispensers. Plus, TEXTURIZED roll tissues that dispense but two sheets at one time — eliminate costly, wasteful "streamers."



STRAUBEL TOWELS come in every price range and fit all standard single or multifold fixtures. They reduce costs because each towel dries more — and faster! Fast dispensing, they speed-up washroom traffic over slow dispensing



roll towels, eliminate prankish "streamers" and greatly reduce janitor refill and maintenance time.

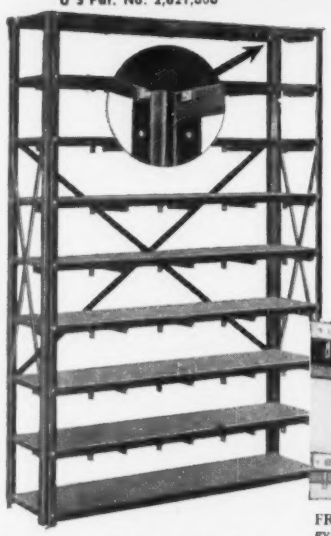
Straubel
TOWELS & TISSUE

Straubel products are sold thru reliable merchants of paper products only. Write for samples — name of merchant nearest you.

STRAUBEL PAPER CO. • GREEN BAY • WIS.

NEUBAUER "TWIN-POST" Gym BASKET RACK

U S Pat. No. 2,621,800



Rigid Corner Posts— Safer Recessed Hasps

The Neubauer "TWIN-POST" corners are actually 2 posts with 3 strong corners (see inset circle). They keep the whole basket rack rigid and in line.

Note below how dividers guide and separate baskets and how hasp and padlock are neatly recessed *inside* shelf edge. Eliminates danger of cuts and bruises.



We also make Neubauer "Twin-Post" shelving in range of sizes. Write for literature.

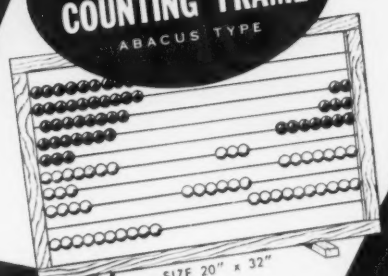
FREE ESTIMATES — Neubauer gym Basket Racks are made in capacity desired for any size basket and can be equipped with casters. Olive green or airline grey. Special colors available.

Inquiries invited from school supply dealers.

NEUBAUER MFG. CO. 2027 Central Ave. Minneapolis 28, Minnesota

PANA-MATH COUNTING FRAME

ABACUS TYPE



Grade 1 to 4 Requirement

for effective visual math teaching

Pana-math is a versatile classroom counting frame for *incidental* learning of the important concepts of arithmetic. The ancient abacus is now adapted as a modern aid to *visualize* numbers, groups and relationships by actual arrangement of beads. Sturdily constructed of 13/16" hardwood the frame has 10 removable push-spring rods each with 10 colorful beads. Specify Pana-math for all new or replacement counting frame equipment. (Pat. No. 2,655,737)

• Time Teaching Clocks • Clock Dials • Magnetic Boards • Flannel Boards • Peg & Peg Boards • Jig Saw Puzzles • Ironing Boards • Stoves • Sinks • Refrigerators • Dutch Cabinets • Easels • Portable Black Boards • Black Board Erasers • Basket Bottoms • Colored Wood Beads • Window Poles

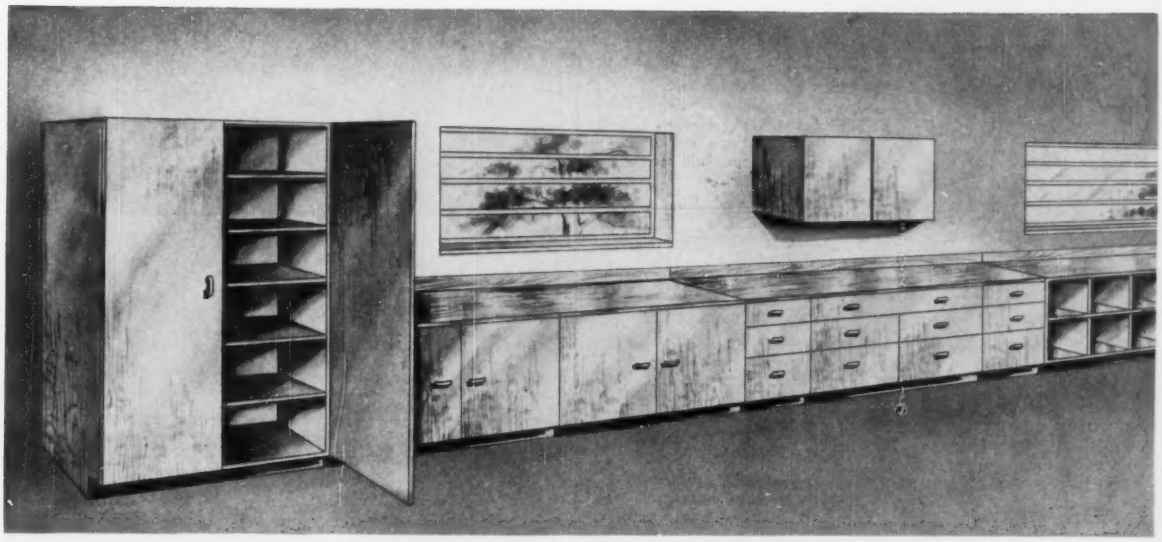
Send for "Manual for Teaching with Counting Frame" by Dr. Irving Allen Dodes.

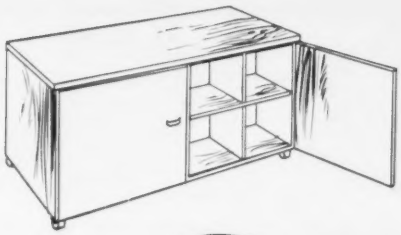
DAINTEE TOYS, INC.
230-C STEUBEN STREET, BROOKLYN 5, N. Y.



NATIONAL INTRODUCES A COMPLETE NEW LINE OF

MULTI-PURPOSE CLASSROOM CABINETS





This is NEVAMAR

- a high-pressure laminate surface
- designed for long life and lasting beauty
- resistant to cigarette burns
- withstands boiling water
- won't craze, crack or peel in normal use
- not affected by alcohol, fruit acids, ammonia, ordinary ink or time
- easy to clean

NEVAMAR has earned this seal

Guaranteed by Good Housekeeping

NATCOLITE TOP
NATIONAL STORE FIXTURE CO., INC.
ODENTON, MD.

Surfaced Both Inside and Out with Maintenance-Free NEVAMAR

National brings to the classroom a complete new line of versatile multi-purpose cabinets that provide every type of storage facility as well as ideal work surfaces. Completely surfaced inside and out with Nevamar, the super-smooth high-pressure laminate, these units are virtually indestructible . . . never need painting or refinishing and are completely vermin-proof. They are easily moved about — can be quickly arranged to serve every possible classroom requirement. And they can be used effectively as room dividers, creating a functional storage wall. Constructed with cabinetmaker precision for lasting service in a specially developed Nevamar honey-maple finish, the complete line offers a wide choice of different units.
Literature available upon request.

NATIONAL SCHOOL FURNITURE COMPANY

Div. of National Store Fixture Co., Inc.

ODENTON, MARYLAND



Midwest CADDIES

For easier, faster handling of FOLDING CHAIRS AND TABLES



★ Saves time!

★ Saves effort!

★ Reduces noise and confusion!

★ Helps solve storage problems!



COMPLETE LINE OF FOLDING TABLES

Simplify moving and storage of folding chairs and tables with a Midwest Caddy. Designed to handle all types of folding chairs and all sizes of folding tables. Adjustable models available for partial loads. Built for rugged service. Easy to handle.



FOLDING PLATFORMS & STAGES



CHORAL AND BAND STANDS

Write for complete catalog

Midwest FOLDING PRODUCTS SALES CORP

Dept. 763, ROSELLE, ILLINOIS

SOLID BRONZE DEDICATION TABLETS

SHOULD BE A *"MUST"* FOR EVERY PUBLIC BUILDING



MODEL No. 100 — 20" x 30"
MADE IN ANY DESIRED SIZE

Send inscription when writing for quotation

SPENCER INDUSTRIES

1508 N. MASCHER ST., PHILADELPHIA, PA.

get low-cost **AUTOMATIC** classroom timing with

Montgomery SYNCHRONOUS PROGRAM CLOCKS



Fully automatic . . . signals silenced over weekends and holidays. Easy to set to any desired schedule . . . pushbuttons provide for special signals without disturbing pre-set schedule. 12 or 24-hour models. Your existing pushbutton system may be changed to a completely automatic one for as little as $89.50 . . . or an entirely new system installed at low cost.



PROGRAM DISC: Automatically regulates signals for 2½ or 5 minute intervals any hour of the day.

PROGRAM PINS: Placed to actuate signals at specified times.

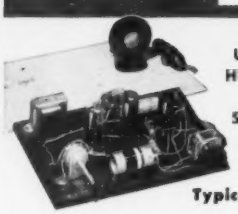
CALENDAR SWITCH: Automatically controls operation for days, nights, week-ends.

PUSH-BUTTONS: Provide special signals without disturbing automatic operation.

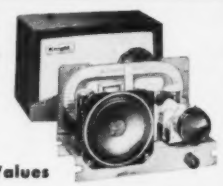
See your dealer for detailed information

MONTGOMERY MANUFACTURING CO. OWENSVILLE INDIANA

for practical effective instruction — ALLIED'S famous KNIGHT ELECTRONIC BUILDERS' KITS



USED BY HUNDREDS OF SCHOOLS



Typical Kit Values

10-in-1 Radio Lab Kit

Instructive, practical, fascinating. Builds any one of 10 projects: broadcast receiver, amplifier, wireless oscillator, home "broadcaster", code practice set, relay, signal tracer, electronic timer, electronic switch, photo relay. With all parts, tubes, instruction manual. Shpg. wt., 10 lbs.

83 S 265. Only **$12.45**

"Ranger II" AC-DC Radio Kit

Popular 5-tube superhet radio project kit. Thousands now used in shop training. Teaches practical radio construction. Commercial quality receiver. Complete kit includes tubes, pre-formed chassis, speaker, loop antenna, all required parts, hardware and easy-to-follow instructions. Shpg. wt., 8 lbs.

83 S 735. Only **$14.85**

Dozens of other fine KNIGHT Kits available: Test Instruments, Amplifiers, Receivers, etc. See our Catalog for details.



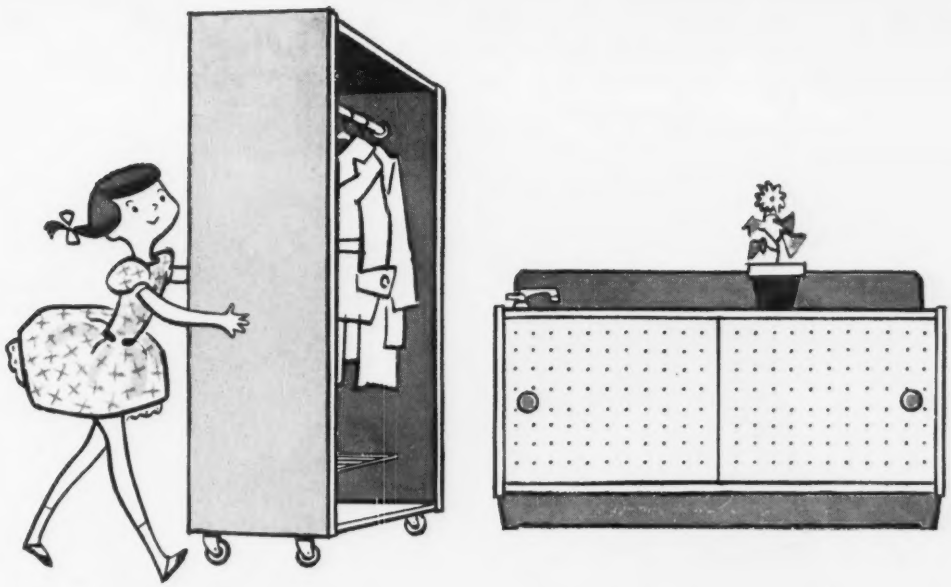
FREE 324-PAGE ELECTRONIC SUPPLY GUIDE

Send for the leading buying guide to everything in electronics for the school: Training Kits, Sound and Recording equipment, Lab instruments, Tools, Books, electronic parts, etc. Write for FREE copy.

Specialists in Electronic Supply for Schools

ALLIED RADIO

100 N. Western Ave., Dept. 10-C-6, Chicago 80, Ill.



Add flexibility to your classrooms



with movable cabinets by *Brunswick*

Turn about is fair play with this little Miss and Brunswick's new Movable Student's Wardrobe.

One side is for storage—has 15 coat hangers, 12 hooks, a shelf for lunch boxes, space for boots. The other side carries a corkboard back for pictures, assignments, articles, anything.

This wardrobe-on-wheels is factory built—cuts costly on-the-job construction of millwork. It's available in three interior colors—is completely integrated with Brunswick's complete cabinet line.

All Brunswick Classroom Equipment is like this—flexible, versatile, easy to use and move.

Your Brunswick representative will be glad to give details on the complete line.

Brunswick

THE BRUNSWICK-BALKE-COLLENDER COMPANY

623 South Wabash Ave., Chicago 5, Illinois

Licking Your Dust Problem?



A cat's tongue almost equals Velva-Sheen when it comes to dust control. But for beautiful floors, *nothing* beats the economy of Velva-Sheen in time and materials! Proof?—15,000 sq. feet of floor space can be maintained dustlessly with Velva-Sheen at a cost of only 37c a week for materials.

● **Order Majestic products from your nearest sanitary supply house, or write us for your local supplier's address.**

MAJESTIC WAX COMPANY
DENVER, COLORADO

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 228. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Color and Modern Design in Classmate Seating Line

A completely new line of school furniture is introduced by American Seating



Company in Coloramic Classmate. Diploma Blue and Classday Coral are the attractive colors used for the steel bases. The colors were selected after careful study and reseach in cooperation with American Color Trends, color consultants of New York. Writing surfaces are of Amerex, the high pressure plastic laminate developed by the company, which resists hard usage.

The desk and chair illustrated are typical of the furniture in the new Classmate line. The single steel pedestal standards of the desk have simple height adjustments in one inch increments for comfortable use by pupils of varying heights. The opening to the book box is shaped for easy access by the pupil from either side as well as from the center. Minimum classroom space is required by the design of the pedestal standards and noise is reduced as there is no need to shift the chair to get in and out. Aluminum scuff strips on the pedestal foot protect the enamel finish. Base and book box are of steel with Amerex desk top.

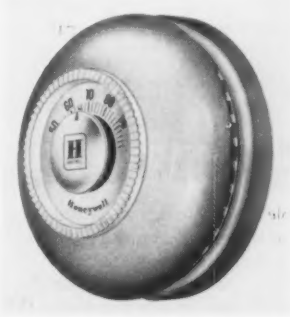
The tubular steel chair is designed for maximum seating comfort. Form and structure are adapted to all body shapes. The deep-curved backs are so constructed that they have motion for automatic adjustment to fit each occupant. The compound-curved seat, with back braces offset for maximum hip room, encourages correct posture with complete comfort. The lip of the seat curves downward to prevent uncomfortable leg pressure in long sitting. Rubber-cushioned, ball-joint chair glides automatically align themselves to the floor for even balance.

The excellence of design, attractive appearance and quality workmanship of American Seating products are incorporated into the new Coloramic Classmate line of furniture. The new line supplements the classroom furniture, auditorium seating, folding chairs and accessories already being made by the company. **American Seating Company, Grand Rapids 2, Mich.**

For more details circle #696 on mailing card

Pneumatic Round Thermostat for Institutional Installation

The new Pneumatic Round TO-910 thermostat is a penumatic control designed for use in large buildings such as schools, hospitals and other institutions. It is designed for use in new buildings but is adaptable for installation in existing schools. The new unit



has a heavy gauge protective metal cover with open ventilating grill-work completely encircling it. Maximum protection is provided for inner parts, yet there is free flow of air across the sensing elements to ensure accurate room temperature measurement. The attractive standard silver-bronze finish of the cover can be easily removed for painting to match or harmonize with room designs.

Designed for use where heating and cooling equipment is controlled by compressed air, the new control introduces the force balance or continuous "feedback" principle for institutional temperature regulation. An exact air pressure signal is provided for any given temperature deviation. The precise and continuous balancing of air supply against requirements gives exact modulation of valves or motors. The TO-910 features a low-mass, bi-metal sensing element for fast response to temperature changes. Temperature settings can be set and the cover locked. **Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.**

For more details circle #697 on mailing card

(Continued on page 186)

Armstrong Resilient Flooring in Variety of New Patterns

The 1956 line of Armstrong products is now available in 75 new patterns. The additions include 18 new patterns in floor tiles, 20 in linoleum, 12 in felt-base rugs and floor covering, 11 in wall covering, seven in a new rubber runner, and seven new patterns in a new combination wool, rayon acetate and fiber Deltox series called Deltone. **Armstrong Cork Co., Lancaster, Pa.**

For more details circle #698 on mailing card

Steel Cabinets for Classroom Work Centers

A full line of modern, attractive steel cabinets is available for classroom and laboratory use. The cabinets are designed for storage and work center needs in all phases of home arts teaching. They are available in six attractive muted colors as well as in white.

The new cabinets are designed in various widths, heights and combinations for complete flexibility in planning efficient home arts rooms. The unit pictured is an example of the attractive appearance and practical design of all pieces in the line. Included in the available units are tote tray cabinets, wardrobes, cabinets for general storage,



cabinets for storage of linens, charts, files and utensils in addition to a number of drawer and cupboard combinations. **Geneva Modern Kitchens, Geneva, Ill.**

For more details circle #699 on mailing card

What's New ...

Wear Resistant Top for Storage Cabinets

Five designs and tones are offered in the new Plastic Hardtop developed by



Nesbitt. The wear resistant top covering for Nesbitt Classroom Storage Cabinets is designed to keep its attractive appearance in spite of scuffs, scrapes and hard usage. The new material blends with modern classroom colors to make a cheerful, bright classroom. It is available in Gray Myth, Cement Gray Stippletone, Beige Stippletone, Tan Irish Linen and Green Stippletone. **John J. Nesbitt, Inc., State Road & Rhawn St., Philadelphia 36, Pa.**

For more details circle #700 on mailing card

Flexible Control Consoles for Central Sound Systems

A new line of sound consoles has been introduced by RCA for central sound systems. The compact, flexible units permit easy selection of central sound distribution facilities to meet immediate requirements and for expansion as needs increase. The "building block" design permits adding units to fill needs as they arise. Three basic control units are used to make dozens of variations to suit specific applications. The three basic consoles include Single Channel, Dual Channel and a low-cost, compact Dual Channel in Single Cabinet.

The attractively styled units have Underwriters Laboratories approval, according to the manufacturer. Outstanding electrical and mechanical features are built into the new units. Simple operating controls are located within convenient reach for finger-tip operation. The



equipment can be readily installed in new or existing schools and is designed for easy accessibility for servicing.

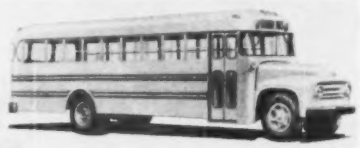
Sound equipment developed for use in conjunction with the new control consoles includes AM/FM Radio Tuner, automatic three speed Record Changer, and high fidelity tape Record-Reproduce Chassis. A low-impedance, 30 watt amplifier supplies the power. A 10 watt, low-impedance amplifier is used for communications. In emergencies, one "All" switch on the master program panel cuts off all programs and gives the emergency announcement full amplifier power to all loudspeaker zones. The combination illustrated shows Dual Channel Control Console with High Fidelity Tape Record-Reproduce Chassis and switches for contacting 80 rooms. **Radio Corporation of America, Camden, N. J.**

For more details circle #701 on mailing card

Oneida Ambassador Bus Features Wrap-Around Windows

A wrap-around design for both windshield and rear windows for maximum vision and built-in safety is a special feature of the new 1956 Ambassador School Bus. The entire body structure has been completely redesigned for functional efficiency and maximum passenger comfort. The new design is said to exceed safety and durability requirements for United States highways.

Greater impact strength is provided by the use of 16 gauge outside front and rear panels. The four pillar rear construction with 6½ inch rub rails and



double-riveted roof panels, and the heavy-gauge outside lower skirt with side pillars extending below the floor line are features contributing to safety. There is full 72 inch inside headroom throughout the bus and passenger seats have been designed for durability and comfort. **Oneida Products, Canastota, N.Y.**

For more details circle #702 on mailing card

Micro-Projector Permits Tracing or Screen Viewing

A low cost unit for the study of microscopic specimens and teaching microscope use is offered in the new Bausch & Lomb Tri-Simplex Micro-Projector. The unit can be used to project specimens on the table top for quick viewing or tracing and to project microscope slides or images of living micro-organisms in liquid for screen viewing by groups of students. Teachers can thus discuss microscopic specimens while they are being viewed simultaneously by all students.

Three microscope objectives can be mounted in a single objective carrier on the micro-projector, permitting rapid

(Continued on page 188)

changes in the magnification of the specimen. A high power tube permits more detailed examination of slides. An efficient heat absorbing glass protects live



specimens from heat of the 100 watt lamp. The Tri-Simplex is made to disassemble easily for storage and to be as easily set up. Complete instructions for effective slide presentations by the science teacher are provided, in addition to an operating manual. **Bausch & Lomb Optical Co., 635 St. Paul St., Rochester 2, N. Y.**

For more details circle #703 on mailing card

Portable Tablet Arms Accommodate Overflow Classes

Gymnasium bleachers can serve as temporary classroom or study room facilities with the new Universal Portable Tablet Arms. When attached to any gymnasium bleachers, the Portable Tablet Arms convert any idle gymnasium space for study periods, examinations, health classes, lectures in connection with physical education and other purposes. The units are easy to set up and remove and can be handled entirely by the students with a minimum of effort.

The extra strong hardwood and steel construction gives the units long life and they require practically no maintenance. They are designed for comfortable writing and are available for either right hand or left hand use. The writing surface is of durable Northern Hard Maple finished with one coat of sealer and two coats of lacquer. The arm support is of hot-rolled carbon steel painted mocha brown, electric arc-welded to base

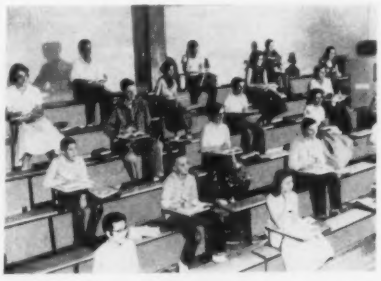
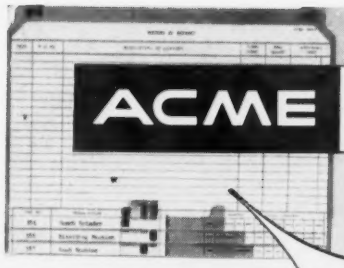


plate. The tablet arms can be stored on a handy rack in minimum space, readily available for use. **Universal Bleacher Co., Champaign, Ill.**

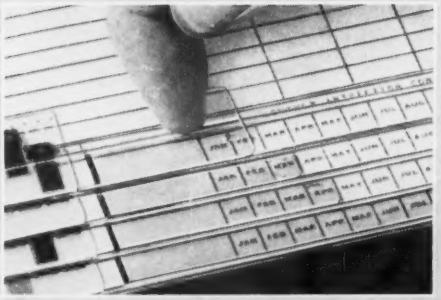
For more details circle #704 on mailing card



ACME VISIBLE

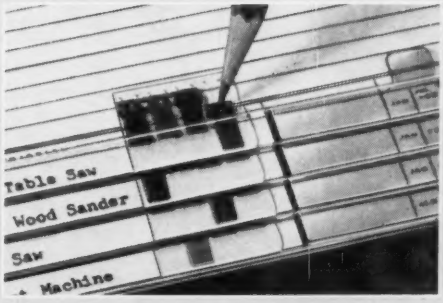
PREVENTIVE MAINTENANCE RECORD SYSTEMS

CUT "DOWN" TIME



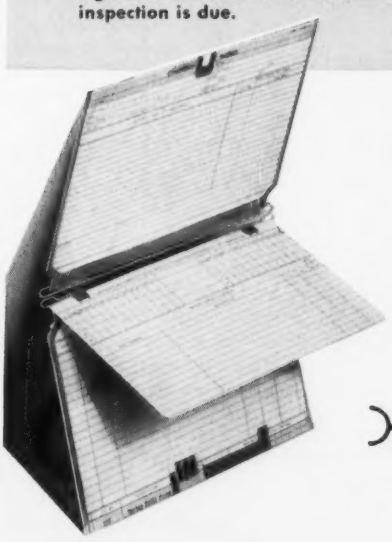
ONCE A MONTH

PROGRESSIVE signals, always visible, show the inspection schedule on a monthly basis. Various colors designate type of work to be done. When work is completed and entered on record card, signal is advanced to month in which the next inspection is due.



ONCE A WEEK

LOCK-IN CHAIN signals, with 4 windows, each a different color, reveal the week within the month when inspection is to be made. With both month and week signalled, you avoid missing semi-monthly inspections or those requiring more frequent attention.



More and more, increased production depends on effective maintenance. The secret of successful Preventive Maintenance is accurate scheduling and rigid adherence to the schedule.

Acme Visible record equipment, with Acme hinged pockets and the two cards on one hanger feature, is ideal for follow-up control. Each machine and motor is listed on an individual card placed in the back of pocket—in facing pocket a "History of Repairs" record is placed, with signals *always visible*, to indicate the next inspection or lubrication date—"Spare Part in Stock" record card is hung on the same hanger as pocket carrying "History of Repairs" card.

ACME VISIBLE RECORDS, INC.
CROZET, VIRGINIA

DISTRICT OFFICES AND REPRESENTATIVES IN PRINCIPAL CITIES.

ACME VISIBLE RECORDS, INC. CROZET, VIRGINIA

☐ Send us more information and literature on Preventive Maintenance.

☐ We are interested in Acme Visible for.....records.
KIND OF RECORD

☐ Have representative call. Date.....Time.....

Company..... Attention.....

Address.....

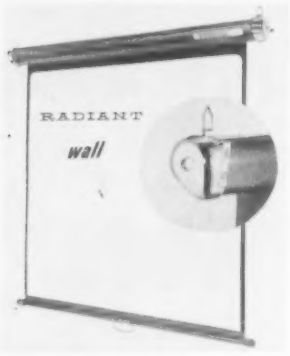
City..... Zone..... State.....

L 356

What's New ...

Wall Projection Screen Has Safety Lock

Designed specifically for classroom use, the new Educator Wall Projection Screen



has an automatic roller lock which ensures smooth roller action, even hanging of fabric and protection against the fabric being pulled beyond the picture edge. Vyna-Flect flame and mildew proof glass-beaded fabric is used in the new screen which is available in six sizes from 37 by 50 inches to 70 by 70 inches. The Educator Wall Model has a new functional "teardrop" design case for maximum strength and stability. It is designed for mounting either on the wall or the ceiling. **Radiant Manufacturing Corp., 2627 W. Roosevelt Rd., Chicago 8.**

For more details circle #705 on mailing card

Porcenell Writing Surface on SlatoSteel Chalkboard

SlatoSteel Chalkboard is a tough, rugged steel board which is durable, smooth and easy to see. It can be used with magnetized letters and figures for "touch and feel" learning and also facilitates posting, as on a bulletin board, because of the magnetic feature.

A patented Porcenell coating on SlatoSteel Chalkboard gives it a velvety hard surface. A special adhesive holds an absolute bond between the steel and the backing sheet. Only a 22 gauge cold rolled steel base is required for the Porcenell finish which results in a light yet strong board which is easily handled and installed. SlatoSteel is easy to install, it can be sawed and drilled on the job, and can be put up by a workman with ordinary tools. It erases clean, is renewed by wiping with a damp cloth and is fire resistant. **Beckley-Cardy Company, 1900 N. Narragansett, Chicago 39.**

For more details circle #706 on mailing card

Counter Surfacing in Single Piece Units

Counter-top, back splash and curved front lip are combined in a single piece in the new G-E Monotop ® countersurfacing. The Monotop sections are fabricated to specified dimensions and made of durable Textolite ® laminated surfacing. The Monotop surfacing is specially molded in a single piece, ready for installation in lengths and corner sections specified. Ten patterns and colors are available in the prefabricated sections. There are no crevices, corners or seams to catch dirt, thus reducing maintenance and improving sanitation. **General Electric Co., Laminated and Insulating Products Dept., Pittsfield, Mass.**

For more details circle #707 on mailing card

Classroom Wardrobes Have Full Width Opening

The new SnychroRobe school wardrobe combines low cost with sturdy construction and practical design. The full width opening permits ready access to the interior with surveillance by the teacher as well as thorough and rapid daily cleaning. The vertical door action saves room space with desks placed as close to the unit as to any wall. It also eliminates the problem of mashed fingers.



The doors operate with practically no effort and can be opened with one hand by even the smallest pupil. The special design of the SynchroRobe permits application of cork to the doors for display or bulletin board use if desired, making possible dual use of the wall area. Accelerated wear tests on the units indicate practically no mechanical maintenance for the normal life of a school. **R. G. Ross and Co., Inc., P. O. Box 1491, Charlotte, N. C.**

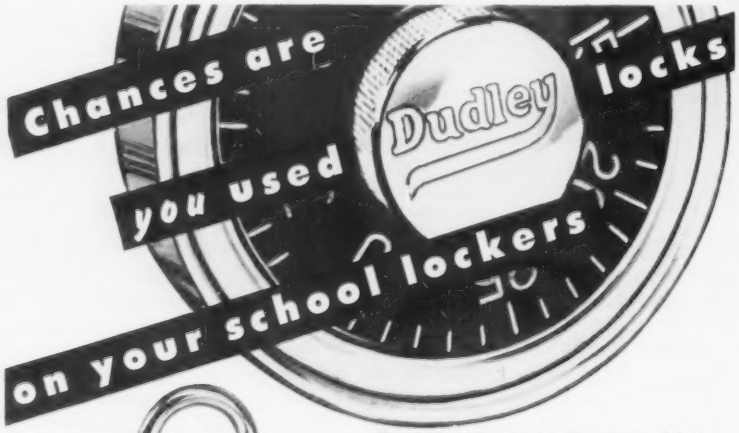
For more details circle #708 on mailing card

Fluorescent Light Guards for Use in Gymnasiums

An attractive welded wire guard is now available as a protective screen for fluorescent light fixtures in gymnasiums and other areas where there is danger of damage. Light weight and strength are combined in the new guards which are constructed to meet safety requirements. No screws or other hardware are required for installing the guards. Three retaining hinges clamp it firmly over the flanged edge of the reflector with two wire clamps on the opposite side which are easily released for lamp replacement. **E. H. Titchener & Co., 67 Clinton St., Binghamton, N.Y.**

For more details circle #709 on mailing card

(Continued on page 192)





Popular rotating dial combination padlock. Stainless steel case, rust resistant mechanism, self-locking.

If you've been a school pupil during the past thirty years, you've probably had experience with dependable Dudley Locks.

For more than three decades, Dudley has set the standard of locker protection in the school field. You'll save time and trouble with a complete Dudley installation in your school. Every Dudley Lock carries a 2-year warranty. *Write for catalog folder.*

Master-Keyed **P-570**

Finest of all master-keyed padlocks. Case of rugged cast aluminum. Unique Dudley Master Key provides extra security.

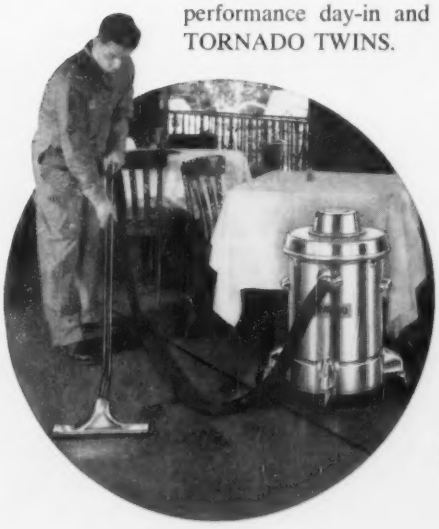
DUDLEY Lock Corporation

Dept. 310 Crystal Lake, Illinois

The TORNADO® TWINS

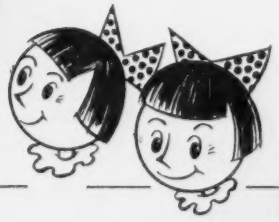
can clean up your Maintenance Costs, too!

Whatever your cleaning needs are, the TORNADO TWINS can do the job quickly and easily . . . cut your maintenance costs, too! They are constructed to take the "knocks," stay out of the repair shop and designed to give top performance day-in and day-out. Here's why you'll save money with the TORNADO TWINS.



TORNADO® NOISELESS

A super quiet vacuum cleaner that surges with power the instant the 1 H.P. motor starts. Separate cooling stream around the motor insures against moisture, dirt and dust. Wet or dry pickup can be done by simply removing the inside filter. The 350 m.p.h. suction speed enables you to pull dirt and water out of every crack and crevice, effortlessly. For a thorough, economical cleaning job buy the Tornado Noiseless.





TORNADO® FLOOR MACHINE

An all-purpose floor machine for quick, easy scrubbing or polishing jobs. Dual switch controls, left hand switch controls solution flow from tank. Self-retracting, non-marking neoprene wheels for added safety and maneuverability. Available in 14", 16" or 18" brush sizes.



Exclusive brush coupler—brush couples by merely rolling the machine over the brush and starting the motor. To remove brush, just flick with toe or finger and brush drops off.

PERFECT FOR:

SCHOOLS • HOTELS • HOSPITALS • MOTELS • RESTAURANTS
CLUBS and other Institutions

WRITE FOR LITERATURE TODAY!

- Tornado Noiseless Catalog No. 707
- Tornado Floor Machine Catalog No. 619

BREUER ELECTRIC MFG. CO.

5098 North Ravenswood Avenue • Chicago 40, Illinois

It's time for a *Change!*



NOW the modern way is Radiant Cooling!

Cooling for human comfort has come a long way—and now has made the greatest advance of all to provide cooling by nature's method—true Radiant Cooling.

Remember the clammy, health endangering conditions set up by the early air cooling systems—but, still a welcome relief from summer's heat. Then came control of humidity, but still tremendous volumes of cold air were employed, with the inherent high cost of equipment and ducts to say nothing of objectionable and annoying drafts.

Now cooling for human comfort is accomplished by absorbing sensible heat by direct radiation. It is an integral feature of the B/M Radiant Panel Ceiling and functions to absorb the heat radiated from the surfaces and room occupants to naturally cool those surfaces and establish a degree of comfort never before attained mechanically. The Burgess-Manning Radiant-Acoustical Ceiling has obsoleted all other systems of cooling and heating and provides, in addition, an acoustic control second to none.

Learn the facts—write for full information.

Ask for Bulletin A-138-N

Architectural Products Division of

BURGESS-MANNING COMPANY

5970 Northwest Highway, Chicago 31, Ill.

Manufacturers of 3-Way Functional Ceilings and Acousti-Booths for Telephoning

EVERYTHING FOR SCHOOLS

COMPLETE EQUIPMENT AND SUPPLIES FOR SCHOOLS

• **CHINA • GLASS • SILVER** — ***Everything for the perfect table service!***

• **UTENSILS** — ***A complete line of fine quality utensils!*** Aluminumware — Enamelware — Stainless Steel Ware — Woodenware — Wire Goods — Cleaning Supplies.

• **KITCHEN EQUIPMENT** — A Complete line of Dishwashers — Glasswashers — Silver Burnishers — Peelers — Mixers — Slicers — Ranges and other Kitchen Machinery.

• **DUPARQUET KITCHEN EQUIPMENT** — the finest quality specially fabricated Sinks — Work Tables — Warmers — Steam Tables, etc.

• **REFRIGERATION** — The finest makes of Commercial high temperature and low temperature refrigerators. Walk-in and reach-in models, upright and chest types. DUPARQUET REFRIGERATORS manufactured for special requirements. Water Coolers — Ice Cream Cabinets.

• **FURNITURE AND FURNISHINGS** — A complete display of fine furniture — Floor Coverings — Linens and Decorative Accessories.

• A skilled Food Service Engineering Department!

• A skilled Decorating Department!

• Complete stock for prompt service!

THESE AFFILIATED FIRMS OFFER COMPLETE SERVICE.
For further information, contact the company nearest you.

STRAUS-DUPARQUET inc.
33 EAST 17TH STREET NEW YORK

ALBERT PICK CO., Inc.
2159 WEST PERSHING ROAD CHICAGO

FOR QUICK, EASY, SAFE OPENING WINDOWS



St. John Bosco School, Hammond, Indiana
Bachman and Bertram, Architects

THAT ASSURE MORE COMFORT, AND LOW-COST MAINTENANCE

Select

LUDMAN Auto-Lok CONTROL BAR WINDOWS



Ludman Auto-Lok Control Bar Window opens without touching screen. Pull Bar up to open, push down to close. Completely eliminates push up screens.

The most important reasons that School Boards select Ludman Auto-Lok Control Bar Windows are to insure greater comfort for pupils and teachers while offering reduced upkeep. **No other window offers such easy operation.** Note illustration at left. It's **the safest school window ever made!**

This famous Ludman window makes for big savings since **it's positively "student-proof"** . . . no parts to work loose, no handles to bend or break, no gears to strip. No adjustments or replacement of the operating mechanism is ever necessary. Truly Auto-Lok Control Bar Windows are the most perfect of all windows. They are **the only windows that fully meet ALL ten requirements that experts* agree are essential in a window.** Send coupon below today.

SCHOOLROOM PROGRESS • U.S.A.

has invited Ludman Corporation and 26 other outstanding American manufacturers of school building products and equipment to participate in a traveling exposition touring 250 cities, which will give school officials an opportunity to see the changes in schoolroom construction over the years. Co-sponsored by the Henry Ford Museum and Greenfield Village and The Encyclopedia Americana it will feature replicas of schoolrooms of 1840 and 1890 contrasted with the ideal classroom of today and tomorrow. Ludman Auto-Lok Control Bar Windows are displayed in the modern section which reveals the latest in classroom architecture. See it in your city.

*Geoffrey Baker and Bruno Funaro in "Windows in Modern Architecture"

LUDMAN *Corporation*
NORTH MIAMI • FLORIDA

LUDMAN LEADS IN SCHOOL WINDOW ENGINEERING

LUDMAN CORPORATION • North Miami, Florida Dept. NS 3

Please send me full information on Auto-Lok windows for modern schools.

Name..... Title.....

Street..... City.....

Zone ..... State.....

G. S. GRANT, Inc. Electrical Contractor
TELEPHONE 7 1985 • 7055 CENTRAL AVENUE • ST. PETERSBURG, FLORIDA
May 2, 1955

50% Labor Saving Pays For Premium Lighting

...Florida Contractor Reports on Job Using

GARCY *Speed-Line*® System

PATENT PENDING

Here is the contractor's report on an installation of lighting fixtures in a number of Florida schools: *"A study of labor costs shows a saving in excess of 50% compared with previous expense."* Money saved on installation more than paid the difference in cost between standard lighting and the finest commercial fixture available, the Garcy VISUALIER.

THIS IS *Speed-Line*





FIXTURES ARE PRE-ASSEMBLED AND PRE-WIRED AT FLOOR LEVEL
No separate external mounting channel needed.

ENTIRE RUN IS RAISED TO CEILING AS A SINGLE UNIT
No straining at top of ladders. Fewer stem hangers needed.

GARCY *Send today for Bulletin 551-L.*

Quality by Design

GARDEN CITY PLATING & MFG. CO., 1732 N. Ashland Ave., Chicago 22, Ill.
In Canada: Garcy Co. of Canada, Ltd., 191 Niagara St., Toronto

Record-Keeping Unit Saves Space

The new Remington Rand Roto-Kard is a drum record housing file handling 8 by 5 inch card records in one compact



electrically or manually operated unit. The completely mobile Roto-Kard has a capacity of 6000 cards for a reference record or 4500 cards for a posting record. It is easily rolled to point of use and occupies only 3.6 square feet of floor area.

Removable self-contained desk-tray segments facilitate handling by several clerks during peak loads. A Slide-A-Deck feature permits shifting complete decks of cards between segments without misplacing or dropping. The Roto-Kard is built to standard desk height, eliminates excessive operator exertion and fatigue and contributes to efficiency of record-keeping. Individual record cards can be removed or inserted quickly without card damage. **Remington Rand Inc., 315 Fourth Ave., New York 10.**

For more details circle #710 on mailing card

Type PB Luminaires for Institutional Use

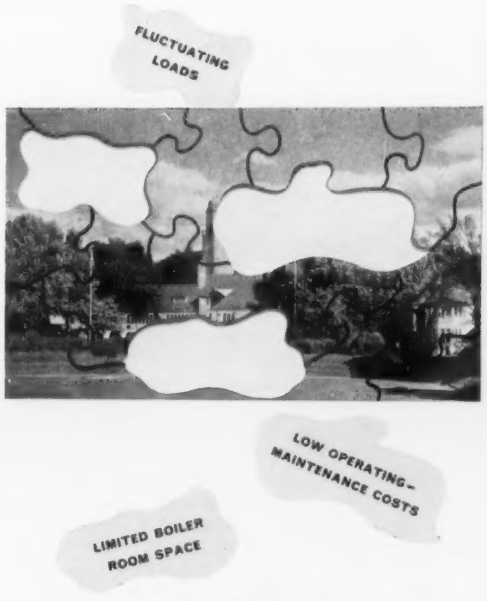
A complete line of fluorescent fixtures for institutional installations is offered in the new Type PB Westinghouse luminaires. The units are available in two and four lamp models in four or eight foot lengths, for mounting in continuous rows or individually, and for rapid start or slimline lamps. Soft, glare-free, semi-indirect lighting with maximum freedom from shadows results from the combination of suspension mounting, a strong upward light component and a ribbed translucent plastic bottom.

Each luminaire consists of a completely wired steel channel, an easily removable channel cover and an extruded one-piece polystyrene shield. Lamps are easily replaced through the open top of the luminaire and the channel and plastic bottom may be removed for servicing. **Westinghouse Electric Corp., P. O. Box 2099, Pittsburgh 30, Pa.**

For more details circle #711 on mailing card

(Continued on page 196)

Zone ..... State .....



HOW A JIGSAW HEATING PUZZLE WAS SOLVED

KEWANEE reserve plus rated boilers

MET SCHOOL HEATING NEEDS

A jigsaw puzzle heating problem . . . that's what it looked like at the Cranbrook School for Boys, Bloomfield Hills, Michigan, since the heating needs were so varied. But every puzzle piece fell into place when Kewanee Reserve Plus Rated Boilers were installed, because all heating needs were solved. Here's the way it worked:

Problem 1: Limited boiler room.

Solution: Two compact Kewanee Scotch Type Boilers with 50% reserve power guaranteed adequate heat under all conditions.

Problem 2: Fluctuating loads—boiler turned off nightly, turned on by stages in the morning.

Solution: Kewanee Boilers had sufficient reserve to assure a fast, dry steam when needed to give quick heat.

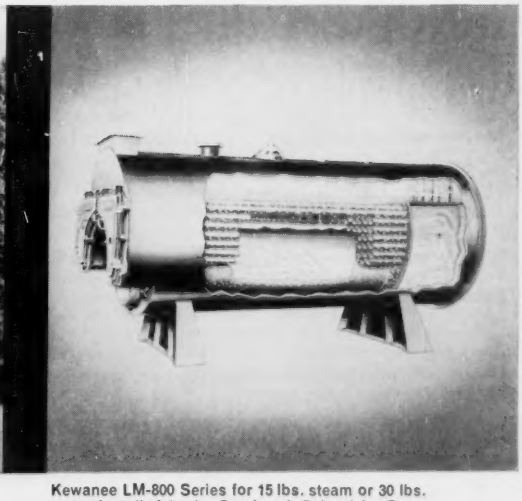
Problem 3: Low operating—maintenance costs.

Solution: Since Kewanee Reserve Plus Rated Boilers certify 50% extra power built in, they operate at "cruising speed." Result—less fuel used, less wear on boiler, greater efficiency delivered.

Kewanee Reserve Plus means boilers are rated on nominal capacity, with adequate power to take care of present needs, emergencies and future expansion. Boilers rated on maximum capacity are inadequate for today's fast growing school needs. Next time select Kewanee Boilers.



Cranbrook School for Boys, Bloomfield Hills, Michigan
Heating Contractor: Laing Plumbing & Heating Company, Pontiac, Michigan
Engineer: Snyder & McLean, Detroit, Michigan



Kewanee LM-800 Series for 15 lbs. steam or 30 lbs. water installed in the Cranbrook School for Boys.

KEWANEE BOILER DIVISION
of American-Standard
101 FRANKLIN STREET, KEWANEE, ILLINOIS

KEWANEE BOILERS

You can depend on Kewanee engineering

DRY Hands QUICK!



—in less than 30 seconds!

National Hand Dryers
have replaced messy towels

in thousands of cost-conscious establishments including: Northwestern University, Greyhound, Bulova, Marquette University, La Guardia Airport, Alton, (Ill.) Board of Education, Sylvania, TWA, Rock Island R.R., Mayo Clinic, Beverly Hills (Calif.) High School, and many others.

Where there are alert buyers, whose first measure of value is quality, NATIONAL Hand Dryers have easy sailing. NATIONALS are in a class by themselves... Lower hand-drying cost... no clogged toilets and no plumbing bills...no *messy* washrooms...*Quick*, sanitary drying by air—for less!

Once you learn the facts YOU, too, will select NATIONAL Hand Dryers!

NATIONAL Dryers Proved Best by U. S. Government Test

MAIL THIS COUPON TODAY!

NATIONAL Dryer Sales Corp.
616-20 W. Adams St., Chicago 6, Ill.

Gentlemen: Without obligation send me copies of letters from users, also folder of facts including cost-saving figures and full details on your FREE-TRIAL offer.

My name .....

Firm name .....

Street .....

City ..... State .....

F

"The Lustre that Lingers"



DOLCOWAX

The lustrous, non-scuff FLOOR WAX that outlasts them all

DOLCOWAX spreads swiftly on large floor areas where in addition to appearance, safety and durability are major considerations. Premium quality DOLCOWAX is a money saver because it gives non-scuff protection longer. DOLCOWAX second-coats beautifully without crawling. Easy to apply on linoleum, cork, asphalt tile, mastic, rubber, vinyl or sealed wood flooring.

For free sanitary survey of your premises consult your Dolge service man.

dependable DOLGE
WESTPORT, CONNECTICUT

LONG LIFE AND COMFORT Guaranteed!



SPECIAL QUANTITY PRICES!

One of Hampden's Famous Five seating chairs. Choice of seating experts. Carefully designed for comfort and 'balance'. Sturdily built for a lifetime! No. 74—Strong channel steel frame. Seat and back posture contoured for comfort. Finished in baked-on, chip resistant enamel. Rubber capped feet.

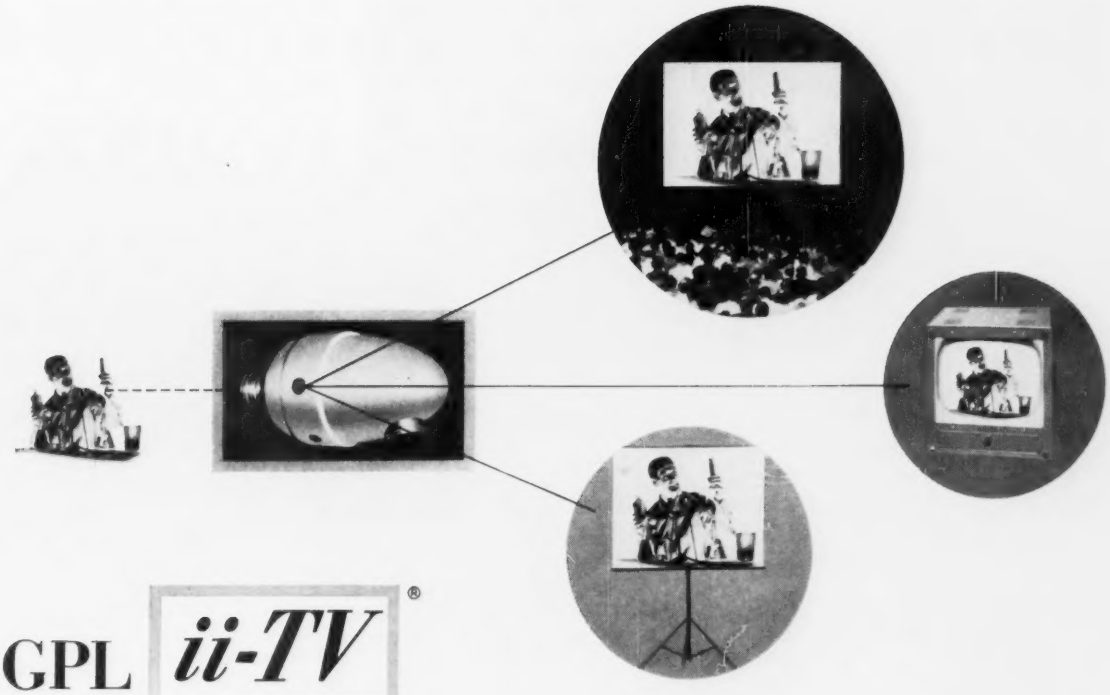
No. 74

5 different styles to choose from

Write Dept. 4-A for illustrated catalog, prices, and name of local dealer.



Hampden SPECIALTY PRODUCTS, INC.
EASTHAMPTON · MASSACHUSETTS



GPL *ii-TV*®

school television *you can afford*

Your schools can have all the advantages of educational television—and at low cost. GPL's *industrial-institutional TV* system, *ii-TV*, will help you to handle rising enrollments without lowering teaching standards or wrecking your budget.

Because GPL *ii-TV* operates over a closed circuit, it requires only simple and inexpensive equipment. The basic equipment for a GPL *ii-TV* System costs less than one-sixth of the national average cost of a single classroom. No FCC license or channel allocation is needed. And because it is *your* schools' private system, you can bring your own specific educational material—organized in the most effective manner for your local needs—directly into the classroom for which the programs are designed.

When you place one of your best qualified teachers in front of the *ii-TV* camera, he can simultaneously instruct classes in every school throughout your system. There is no limit to the number of participating classes. All students, watching on large screen TV receivers, will see and hear better than if they were in the same room with the instructor. And with the GPL TV projector, whole auditoriums full of students can follow him in movie-size pictures on a wall screen.

By making it possible for selected teachers to teach their subjects to many groups simultaneously, *ii-TV* also makes it easy to give simultaneous instruction to small groups of students scattered throughout the system—providing special classes both to enrich the curriculum and to help exceptional children. In demonstration courses, *ii-TV* effects added economies by multiplying the usefulness of laboratory apparatus and visual teaching devices.

Closed-circuit television has already proved of great value in medical education, armed-forces training centers, universities. Studies show that students learn as well with television teaching as with conventional classroom instruction. And television teaching does not essentially change the instructor's technique.

GPL *ii-TV* also has many non-teaching uses in schools for all kinds of special programs and for staff meetings. And both money and staff time can be saved by letting the ever-alert eye of the *ii-TV* camera watch and report wherever supervision or protection are required for students or buildings.

The entire GPL *ii-TV* transmission system can be easily carried by one person, making it possible to originate programs anywhere. Anyone on your staff can operate the system; no special lighting equipment is needed. All parts of the GPL *ii-TV* System are made with the same high skills in design and production that GPL puts into its outstanding broadcast, theatre, military and industrial TV equipment. As a result, the GPL *ii-TV* System is sturdy, requires little maintenance, produces bright, clear pictures that give every student a front-row seat.

For further information about GPL *ii-TV* and how it can be adapted to your schools' needs, write to:

General Precision Laboratory Incorporated
Pleasantville, New York

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

TEACHING INSTRUMENTS



MICROSCOPES

- Priced low for school budgets
- Easy to use
- New achromatically balanced objectives colored for rapid identification

No. 66S

Student microscope with performance features of higher-priced instruments. Coarse and fine adjustments. 100X and 430X magnifications. Disc diaphragm and concave mirror.

5 or more $124.00





NEW No. 73S

Single, easy-to-use spring-loaded focusing adjustment eliminates racking objectives through slides. Clear 100X and 430X magnifications. Available with mirror or 385A substage illuminator.

5 or more $102.60

No. 78S

Two inches lower than conventional instrument for student comfort. Built-in light source. Single, spring-loaded focusing adjustment. 100X and 430X magnifications.

5 or more $102.60

ILLUMINATORS

- Designed especially for microscopes
- Lamps replaceable at low cost



A compact, 15 watt, bakelite substage illuminator for monocular microscopes. Attached to #73 microscope with bracket adapter.

5 or more $4.50

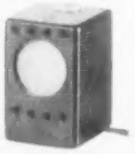


Table illuminator for up to four microscopes. Large metal shade directs light towards table surface.

5 or more $16.20

American Optical

INSTRUMENT DIVISION
BUFFALO 15, N. Y.

Dept. 35

Please send me your new *FREE CATALOG* "Teaching Instruments"

NAME .....

TITLE .....

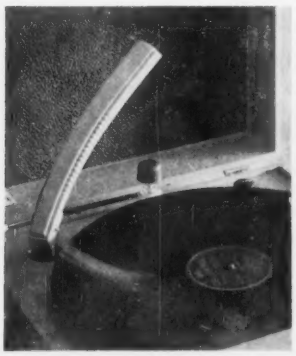
SCHOOL ADDRESS .....

CITY ..... ZONE ..... STATE .....

What's New . . .

Phonograph Pickup Arm Prevents Accidental Dropping

Accidental dropping of the pickup arm on a record is said to be eliminated in



the new Model 5J-6 Califone phonograph. So balanced that it "falls upward," the new type pickup arm rests on a "foolproof" arm rest easily and snugly and is firmly held.

A second new Califone phonograph, the Model 7V-6, includes the features of the Model 5J-6 and also has a continuous variable speed control from 16 to 88 rpm with an illuminated stroboscope for checking all speeds. The new features were developed as the result of conferences with audio-visual directors of school systems, according to the manufacturer. **Califone Corporation, 1041 N. Sycamore Ave., Hollywood 38, Calif.**

For more details circle #712 on mailing card

World Literary Map Gives New Meaning to Stories

A new panorama of world literature is shown in the World Literary Map recently developed. Printed in seven bright, attractive colors, the map gives new meaning to stories and other writings when the locale can be studied. Attractive literary maps promote reading and provide a basis for selection of well rounded reading lists. The new map is available in unmounted sheet form and in cloth backed mounted form. **Denoyer-Geppert Co., 5235 N. Ravenswood Ave., Chicago 40.**

For more details circle #713 on mailing card

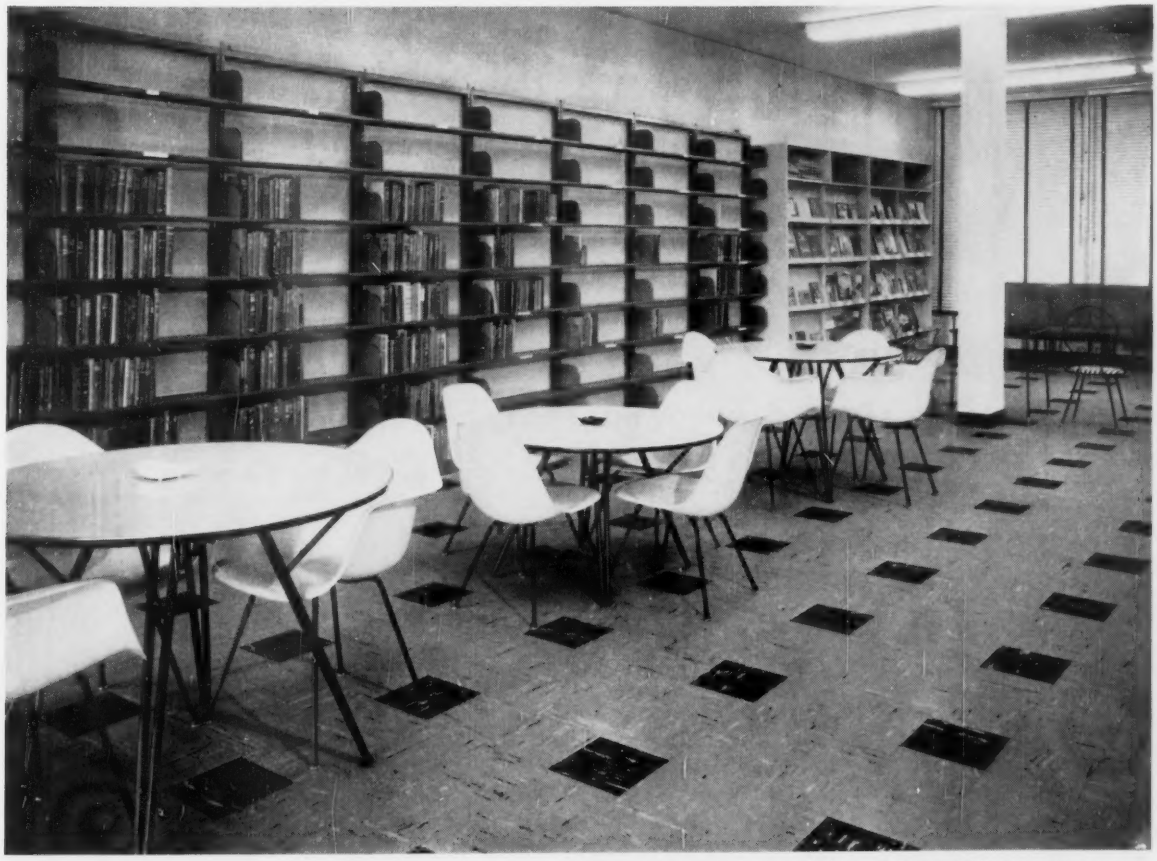
Decorative Stitches With Added Singer Discs

Sixteen new decorative stitch discs, available in sets of four, are added to the discs now available for the Singer completely automatic Swing-Needle Sewing Machine. A wide variety of stitch designs can be made with the thirty discs now available for use with the machine. Variations possible on each disc permit the making of innumerable designs, including both twin and single needle operation. **The Singer Sewing Machine Co., Inc., 149 Broadway, New York 6.**

For more details circle #714 on mailing card

(Continued on page 200)

AZROCK® Passes Every Schoolroom Test For Easy-to-Keep, Low-Cost Floors



McCune, McCune & McCune, Architects

In terms of economy *plus* beauty, Azrock gives you better school floors every time. Compare Azrock with other modern floorings – it stands out, point for point, in attractive appearance, easy care, longer life and low first cost.

It is a pleasure to color-plan your floors with Azrock. 27 bright, clean, new colors have been especially keyed to aid in designing today's school interiors. Lighting problems, too, have been considered in formulating Azrock colors. You have a wider choice of colors with high light-reflectance, and this means better seeing with less extra illumination.

Easy care is another quality that makes Azrock your *practical* investment in better floors. The gleaming, smooth, tough surface needs only quick and simple cleaning to keep it fresh and bright. Fewer janitor hours are needed, maintenance budgets go further.

Azrock's longer life means even more economy. Its asphalt-asbestos structure is tightly interlaced, built with greater density, to resist the punishment of heavy traffic.

Although Azrock gives you far more in economy of maintenance, durability and appearance – it costs no more than ordinary asphalt tile. If you must get the full value, and more, from every budget dollar, let our representative show you how Azrock can help solve your flooring problems. No obligation, of course.

AZROCK FLOORING PRODUCTS

AZROCK PRODUCTS DIVISION • UVALDE ROCK ASPHALT CO.

FROST BANK BUILDING • SAN ANTONIO, TEXAS • MAKERS OF VINA-LUX • AZROCK • DURACO • AZPHLEX

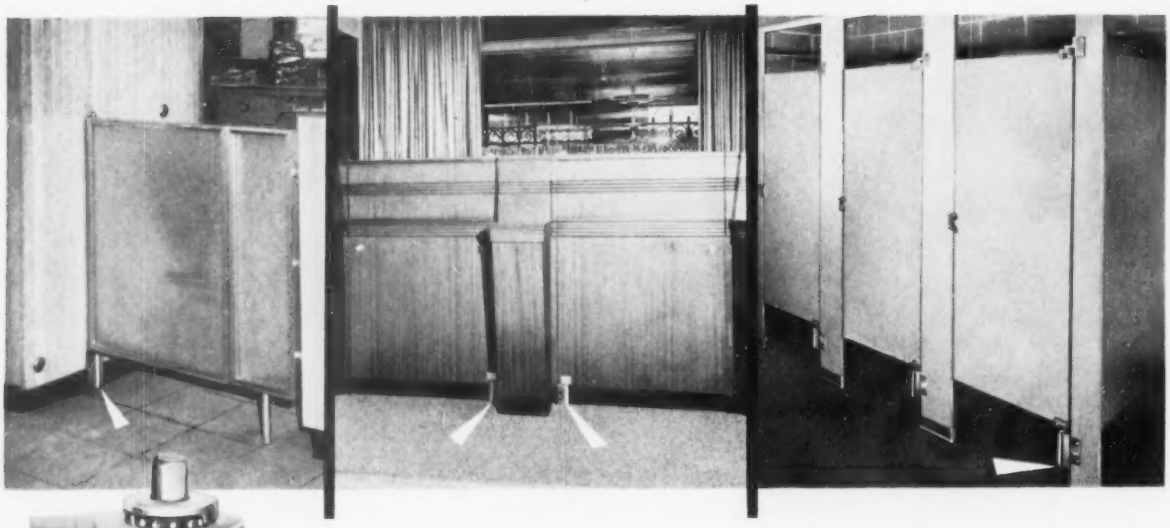
RIXSON

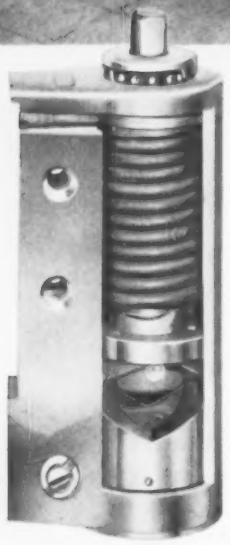
no. 350 (hydraulic check)

dwarf door CLOSERS

SILENTLY

bring office rail or half partition gates and lavatory stall doors to a *gentle close*





In keeping with the new design and sound quieting trends of the MODERN office or factory. No flip-flapping or slamming of office rail gates or lavatory stall doors when under the hydraulic control of RIXSON no. 350 series closers. Available for pivotal hanging or hinged doors . . . single or double acting . . . with over a dozen different attachment combinations to meet most any installation problem.

write for complete details

THE OSCAR C. RIXSON COMPANY

9100 west belmont ave. • franklin park, ill.



Typical classroom in the John B. Schaffner School, Louisville, Kentucky, showing installation of Acousti-Celotex Cavity Tile, a new material incorporating a unique acoustical principle. Application shown on Celotex "T & T"* Suspension System. Acousti-Celotex Contractor: E. C. Decker & Co. of Kentucky, Inc.

NEW Acousti-Celotex Cavity Tile . . .

Effective...Attractive...Brings QUIET, Adds Beauty to Schoolrooms



The Acousti-Celotex Sound Conditioning installation in Louisville's John B. Schaffner School combines extreme effectiveness with unusual eye-appeal. It consists of new Acousti-Celotex Cavity Tile on Celotex "T & T" Suspension System, providing high sound-absorption value and incombustibility with economy and simplicity. Utilizes 12" x 24" white finish panels which may be washed *repeatedly* and painted *repeatedly* without loss of sound-absorbing properties.

Easily Maintained—A sound-absorbing ceiling of Acousti-Celotex Tile arrests disturbing noises in classrooms, corridors, libraries, study halls, auditoriums, gymnasiums. The *quiet comfort* it brings aids efficiency and morale of students and teachers. These ceilings are quickly installed in existing buildings or during new construction and need no special maintenance thereafter.

This Costs You Nothing—You do not pay one cent for the most important part of Acousti-Celotex Sound Conditioning—*30 years of sound engineering experience . . .* in acoustical installations of all types, under all conditions. **Mail Coupon Now** for a Sound Conditioning Survey Chart that will bring you a *free analysis* of the noise and acoustical problems in your school, plus a free factual booklet, "Sound Conditioning for Schools and Colleges." No obligation.

*TRADE MARK

ACOUSTI-CELOTEX
REGISTERED U. S. PAT. OFF.
Sound Conditioning

TRADE MARK

Products for Every Sound Conditioning Problem—The Celotex Corporation, 120 S. LaSalle Street, Chicago 3, Ill. • **In Canada:** Dominion Sound Equipments, Ltd., Montreal, Quebec.

Mail Today!

The Celotex Corporation, Dept. M-36
120 S. LaSalle St., Chicago 3, Illinois

Without cost or obligation, please send me the Acousti-Celotex Sound Conditioning Survey Chart, and your booklet, "Sound Conditioning for Schools and Colleges."

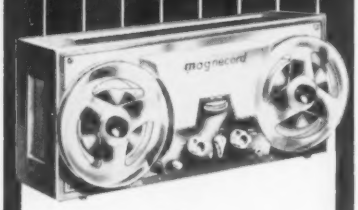
Name_____ **Title**_____

Address_____

City_____ **Zone** ____ **State**_____

What's New . . .

A NEW Magnificent tape recorder BY MAGNECORD



THE Citation

The Citation, finest portable tape recorder in the moderate-price field, now makes it possible for you to afford professional levels of full frequency and versatility.

As a powerful teaching and training aid, the Citation assures you of the perfect fidelity so necessary. It has features usually found only in professional tape recorders, yet is within reach of moderate budgets.

Before you decide, see the Citation. To be convinced, hear the Citation.

Write for full information, or ask your Magnecord dealer for a demonstration. He's listed in the classified telephone directory under "Recorders."

Magnecord, inc.
the finest name in tape recording
1101 S. KILBOURN AVE., Dept. NS-3
CHICAGO 24, ILLINOIS

Geiger Counter for Classroom Demonstrations

Complete classroom demonstrations of radioactivity can be given with the new Cenco Radioactivity Demonstrator. The



instrument provides a triple indication of radioactivity by speaker, flashing light and built-in count rate meter. It can be used for tracer study demonstrations and for such radioactivity phenomena as absorption, detector efficiency, health hazards and the like. It is so designed that students may work problems themselves.

The instrument can also be used in biological classes for trans-location study, it is excellent for study of photosynthesis, and operates by plugging into any standard 115 volt outlet. **Central Scientific Co., 1700 Irving Park Rd., Chicago 13.**

For more details circle #715 on mailing card

Hand or Electric Operation in Burroughs Quiet Calculators

Three hand operated and four electric operated machines are offered in the new Burroughs Series "C" Calculators. Exceptionally quiet operation is achieved for the electric models through the newly designed rubber shock mounts supporting the calculating mechanism.

An amber gray case and brown keyboard background with brown and ivory colored keys make for attractive color treatment. Three of the new styles are offered with "picture window" dials for greater ease in reading answers. The live key action gives the operator instantaneous answers. **Burroughs Corporation, Detroit 32, Mich.**

For more details circle #716 on mailing card

Soundview Projector in 500 Watt Model

The new 500 watt Soundview "PhD" filmstrip and slide projector is designed primarily for use in schools and colleges. It features ease of operation and rugged construction. The modern, lever-action film advance is an easy to operate, positive and quick manual film advance mechanism.

Other features of the new model include separate switch for the fan to permit after-cooling and a unique air duct blowing cool air directly to the film aperature, eliminating the possibility of film damage. **Automatic Projection Corp., 282 Seventh Ave., New York 11.**

For more details circle #717 on mailing card

(Continued on page 204)

LIGHTWEIGHT!

TUMBLING MATS

WRESTLING MATS

WALL PADDING

WRITE FOR CATALOG

PETERSEN GYM MATS
BELFIELD AT WISTER ST.
PHILADELPHIA 44, PENNA.



Direct Prices & Discounts to Schools, Churches, Clubs, Lodges and All Organizations



Full line of folding chairs

MONROE TRUCKS

Transport and store your folding tables and chairs the easy, modern way with Monroe All-Steel Trucks. Each truck is designed to handle either tables or chairs. Construction of Truck No. TSC permits storage in limited space.



Above: Transport-Storage Truck No. TSC



Right: Transport-Storage Truck No. TSB



WRITE FOR CATALOG, PRICES AND DISCOUNTS

THE Monroe COMPANY
76 CHURCH STREET, COLFAX, IOWA

Why Do Superintendents Specify *NYCO* Display Rail?

Thousands of superintendents specify Nyco Display Rail . . . year after year. They have found it to be superior to all other rails because of these features:

STURDINESS—Constructed of heavy-gauge, cold-rolled steel. Will not bend or sag under a heavy load, as aluminum or other light-weight metal rails may do.

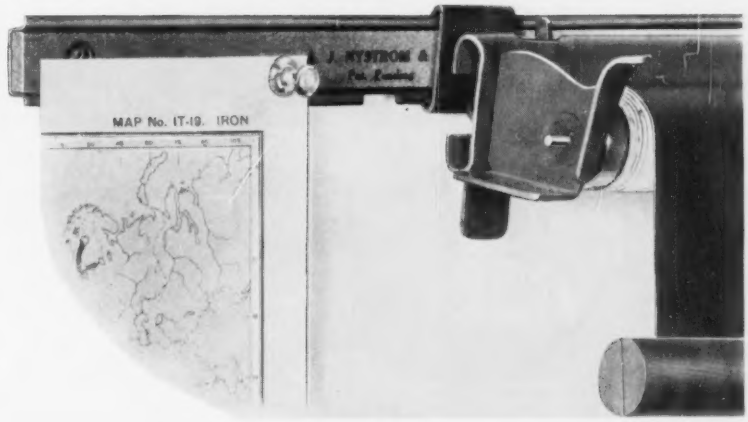
DUAL-PURPOSE—Nyco Display Rail provides not only a steel rail with sliding hooks but also a cork strip that serves as a bulletin board.

FUNCTIONAL DESIGN—Nystrom has drawn on their fifty-three years of experience and service to American schools to design a map rail that meets *every* classroom need.

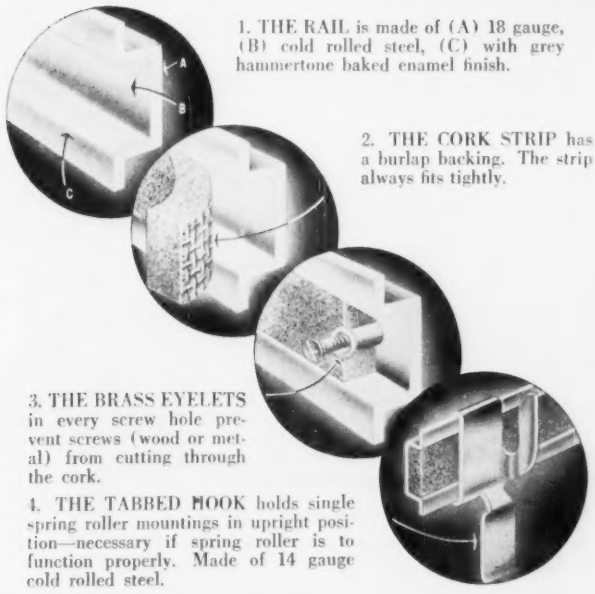
EASE OF INSTALLATION—Unique design permits easy installation of Nyco Display Rail on any surface: wood, wall-board, metal or masonry.

CHOICE OF COLORS—This is the only rail that has cork strips available in three colors: beige, light green or grey.

ONLY NYCO COMBINES ALL THESE FEATURES:







1. THE RAIL is made of (A) 18 gauge, (B) cold rolled steel, (C) with grey hammertone baked enamel finish.

2. THE CORK STRIP has a burlap backing. The strip always fits tightly.

3. THE BRASS EYELETS in every screw hole prevent screws (wood or metal) from cutting through the cork.

4. THE TABBED HOOK holds single spring roller mountings in upright position—necessary if spring roller is to function properly. Made of 14 gauge cold rolled steel.

LOW COST PER ROOM

Twenty linear feet of rail (average width of a classroom), cork-lined, with six hooks varies from $8.22 to $9.42 depending on quantity ordered.

Also available without the cork strip, at prices ranging from $6.42 to $7.20 per room.

SEND FOR A COMPLIMENTARY SAMPLE

We are so confident of the superiority of Nyco Display Rail that we invite you to compare it with any other rail. We will be pleased to send you a one-foot sample, with attached hook. Superintendents and architects please use letterhead stationery . . . enclose coupon.

Name:_____

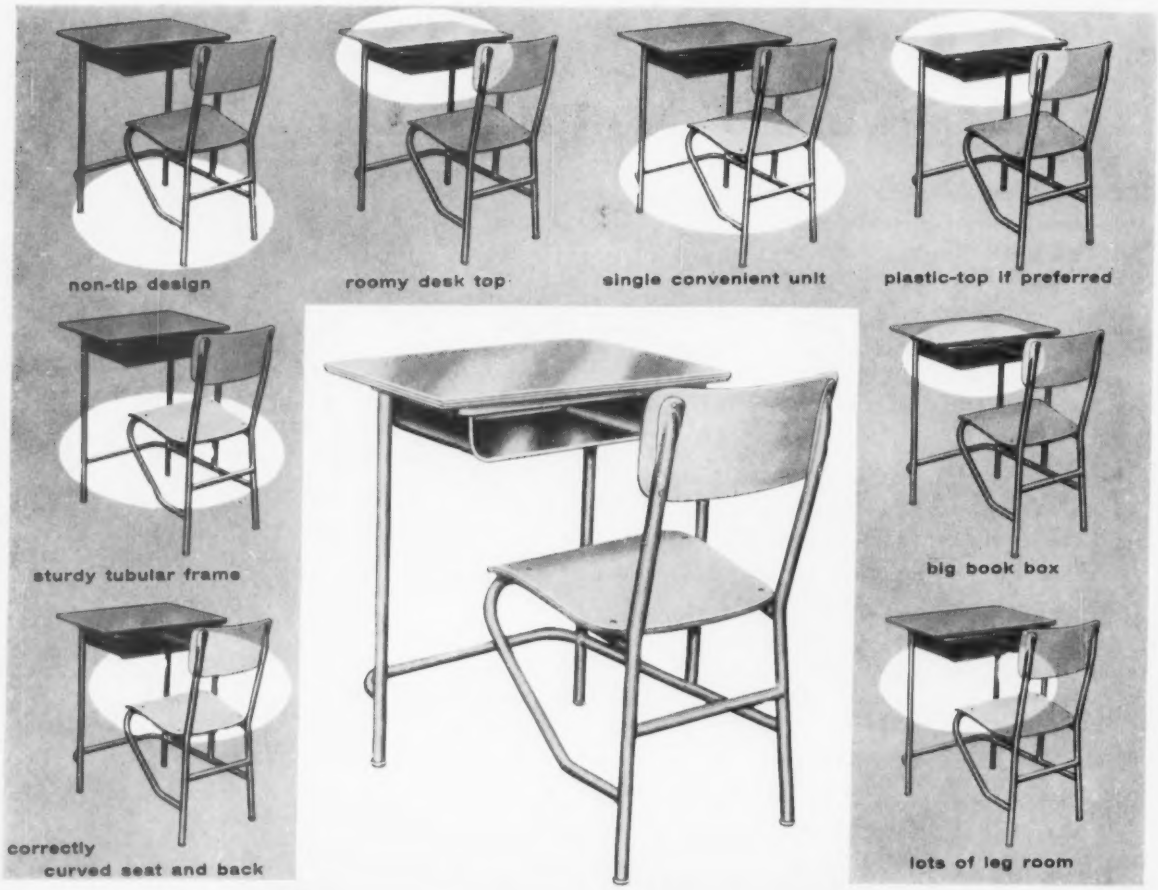
Position:_____

Street Address:_____

Post Office:_____

A. J. NYSTROM & CO.

3333 N. Elston Ave., Chicago 18, Illinois



8 REASONS WHY

you should select the new Griggs 786 Study Top Desk

All *eight reasons why* add up to more satisfactory, more durable seating for your school. And possibly the most important of all is that you have single units, combining seat and desk, that make neater, more-easily-arranged classrooms.



Skyliner No. 450 Chair Desk



New 770 Desk



Model 50 MBW Auditorium Chair

GRIGGS EQUIPMENT COMPANY

Belton, Texas

Write for beautiful new Griggs catalog

the Answer to a Teacher's Cares!

A combination that has revolutionized teaching methods

DITTO D-10 Duplicator + DITTO Work Books

Think of it! 59 New DITTO Workbooks . . . each book containing pre-printed daily lesson material ready for making up to 300 or more bright copies on your DITTO Duplicator. What a help in lesson planning and preparation. What an aid in increasing student interest. What a saving in classroom time and night work. More time for yourself . . . More time for self-improvement . . . More time for leisure and relaxation . . . More time for doing the things you want to do.

The new DITTO D-10 . . . Absolutely the last word in a low priced school duplicator. Always ready to turn out up to 300 or more bright copies at rate of 120 per minute, in 1 to 5 colors, at once. Of anything typed, written, traced or drawn . . . No stencil, No mats, No inking, No make ready . . . On any size copy from 3″ x 5″ to 9″ x 14″ . . . at just pennies in cost. Mail coupon for free demonstration.



59 New DITTO Workbooks

. . . For Reproduction on Liquid Machines. An outstanding DITTO service for every grade and every subject. Written by teachers—Edited by nationally recognized educators. Each $3.25. Choose from any of the splendid new titles in the DITTO Workbook Catalog. Send for free sample copies.

For brighter Classes—Easier Teaching—**MAIL COUPON NOW**

DITTO, Incorporated, 618 S. Oakley Blvd, Chicago 12, Ill.

Gentlemen: Without obligation, please:

- ☐ Send literature on your new D-10 Liquid Type School Duplicator.
- ☐ Send FREE: Samples and catalog of new Workbook Lessons.
- ☐ Arrange a DITTO demonstration for me.

Name_____

School_____

Address_____

Post Office_____ County_____ State_____

What's New ...

Mobile Drying Rack for Cafeteria Trays

The new Cres-Cor mobile, all-aluminum drying rack is designed to ensure



complete drying of trays and pans. Cafeteria and other food trays are washed and inserted vertically in the rack which can then be rolled to a suitable place for drying or storing. When trays are to be used again, the rack is rolled to the place of need.

Lightweight and sanitary, the racks are available to handle four different sizes of trays or pans. They are constructed of aluminum reenforced tubing, sealed at both ends, with a choice of corrugated or angle-ledge shelving. Heavy duty handles at both ends and Neoprene casters make the racks easy to move, even when loaded. Other sizes are available on order. **Crescent Metal Products, Inc., 18901 St. Clair Ave., Cleveland 10, Ohio.**

For more details circle #718 on mailing card

Acoustical Ceiling Panel Is Non-Combustible

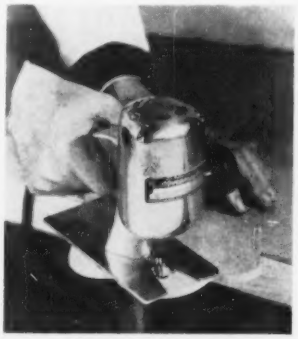
A new version of Tectum is now available as an acoustical ceiling panel. The non-combustible material provides low cost sound control. The square edged wood fiber panels are 24 by 48 inches in size. In addition to their high acoustical properties, the panels also serve as insulation. The factory applied felt backing provides a barrier against sound transmission.

The panels may be installed by mechanical suspension or may be nailed to furring strips. The new material combines light weight with structural strength and rigidity, requiring only everyday woodworking tools for cutting. It has an attractive off white color which can be painted without affecting acoustical properties. **Tectum Division, Peoples Research & Mfg. Co., Newark, Ohio.**

For more details circle #719 on mailing card

Portable Electric Tool Is Versatile Machine

A jig-saw, router, jointer and shaper table are combined in one unit in the Routo-Jig. The compact, portable electric tool is low in price and suitable for cutting, jointing or shaping wood, plyboard, composition or plastic. It has a number of uses in the school shop as well as for maintenance crews. A rectangular base converts the Model 140 Routo-Jig quickly for jig-saw work while a circular base makes it a router. It becomes a shaper and jointer instantly by attaching in an inverted position to a shaper table. The unit has a powerful Universal motor with a large air intake



and exhaust vents to keep the motor cool over long periods of continuous operation. **Porter-Cable, 56 Exchange St., Syracuse, N. Y.**

For more details circle #720 on mailing card

(Continued on page 208)



first see *General* floorcraft's amazing new floor maintenance machines – then decide!

When you've seen the revolutionary GENERAL KR DeLuxe Machines, with more features than you can count . . . (*another* First in America's Foremost Line of Quality Floor Machines), you'll find now, as always, GENERAL FLOOR MACHINES CANNOT BE OUTDONE!

THESE QUALITIES MAKE GENERAL THE 'PACE-SETTER'!

- PRECISION ENGINEERING
- RUGGED CONSTRUCTION
- MAINTENANCE-FREE OPERATION
- MANY LABOR-SAVING FEATURES
- PERFECT BALANCE — LOW CENTER OF GRAVITY
- ALL CORROSION-RESISTANT POLISHED METALLIC SURFACES

Famous K Series available in 12", 14", 16", 18", 22" sizes

General's New KR DeLuxe Machines with These New PLUS Features!

1. EZEE-ADJUSTO HANDLE — fully adjustable for space-saving storage, for height of any operator, or for pivotal operation.
2. EZEE-ROLL WHEELS — two 6" wheels, with semi-pneumatic tires.
3. WRAP-A-ROUND BUMPER —made of non-marking white rubber.
4. AUTO-MATE SAFETY SWITCH — for right or left hand operation.
5. NON-MARKIT grey rubber cord.



KR-14 — 15" diam. operating brush spread
KR-16 — 17" diam. operating brush spread
KR-18 — 19" diam. operating brush spread



General Wet and Dry E-Con-O-Vac Commercial Vacuum Cleaner Model 66 and 55

MAIL COUPON FOR INFORMATION ON REDUCING FLOOR MAINTENANCE COSTS!

☐ Have Distributor call on us.
☐ Send complete information, literature and prices.

COMPANY _____
STREET _____
CITY _____ STATE _____
MY NAME _____ TITLE _____ NS-3

General **FLOORCRAFT, INC.**
421 Hudson St., New York 14, N. Y.

World's Most Complete Line of Floor Machines For Home, Industrial and Institutional Use



"Last year, I wore an ape's head to typing classes"

Edna: But Cathie, didn't you look peculiar?
Cathie: I certainly did! But then I *felt* peculiar. Frustrated, if you know what I mean.

Edna: Frustrated I buy. But how come?
Cathie: I was teaching electric typing. The classes weren't learning. I couldn't teach on the machines we had.

Edna: I see. But why the ape's head?
Cathie: The ape's head? That's easy. I was going nuts anyway. So I decided I might as well look the part.

Edna: But how come you gave *up* wearing the . . . er . . . costume?
Cathie: Nothing could be simpler. We got in a batch of new Royal Electrics. And what a *difference!* To begin with they have five distinct advantages—the repeat keys for example—which make them easier to learn on and as easy to teach on as rolling off a log.

Edna: How's that?
Cathie: Step into my classroom and I'll give you a demonstration. But watch out. It'll take you only a few hours of practice to become completely familiar with the new Royal Electric. So don't say I didn't warn you.

ROYAL® *electric*

portable • standard • Roytype® business supplies

Royal Typewriter Company, *Division of Royal McBee Corporation*

New Free Teaching Aids! For You: *Electric Typing for the Classroom Teacher.* For pupils: *The Key to Relaxed Typing.* Write to "The School Department, Royal Typewriter Co., Port Chester, N. Y."

TROUBLED WITH
MOISTURE-TRACKING
ON WAXED FLOORS?



USE CHURCHILL'S

SUPER-55

WATER-REPELLENT

FLOOR FINISH

Moisture-tracking on waxed floors can cause a lot of trouble and extra work. But such problems are easily solved with Churchill's *new* Super-55 . . . a neutral, self-polishing, water-solvent wax that assures maximum protection for all types of floors. Meets Government specifications.

The high percentage of hard carnauba wax makes Super-55 exceptionally long-wearing . . . with extensive square-foot coverage. It repels water in beads (like a duck's back) and prevents all the trouble that accompanies moisture-tracking.

Super-55 is made for use on rubber tile, asphalt tile, linoleum, varnished wood and other commonly used materials. Just spread on thinly, like paint. Do not rub. Drying time, 20 minutes. Average spread per gallon, 1000 to 1800 square feet. Investigate Super-55 today. Just call your nearest Churchill distributor or representative, or write . . .

CHURCHILL MANUFACTURING COMPANY

GALESBURG ILLINOIS

FOR SUPERIOR FLOOR AND BUILDING MAINTENANCE MATERIALS AND TOOLS

Easy to SEE, SELECT, REPLACE
up to 66 different
MAGAZINES, FOLDERS,
WORKBOOKS, etc.



ALL-METAL
Halverson
MAGAZINE
DISPLAY
RACK

Most sensible "help-yourself" unit you ever saw! New, instantly adjustable dividers on each shelf accommodate literature of any width. Eleven tilt-back pockets insure fully visible titles, neat arrangement, undamaged storage. Ideal for Library, Study Room, Reception Room and Office.

Heavy-gauge, all-steel, finished in Gray Hammerloid Baked Enamel. Dignified, sturdy for a long life of convenience. Mar-preventing rubber feet protect floor, rugs.

HOLDS, DISPLAYS & PROTECTS a "whole library" in less than ½ floor space of average table

MODEL NO. 20P

$42.50 F.O.B. CHICAGO

Overall size, 36" high, 27½" wide, 15" deep. Pockets 13" wide, ¾" deep, 8" high at front, 11" at back.

Shipped completely set up. No screws or bolts to assemble.

ORDER TODAY FROM

HALVERSON SPECIALTY SALES

1221 W. Chestnut St. Chicago 22, Illinois

Subsidiary of MIM-E-O STENCIL FILES COMPANY



SUPERIOR SCHOOL FURNITURE

Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, Tablet Arm Chairs, and Teachers Desk.

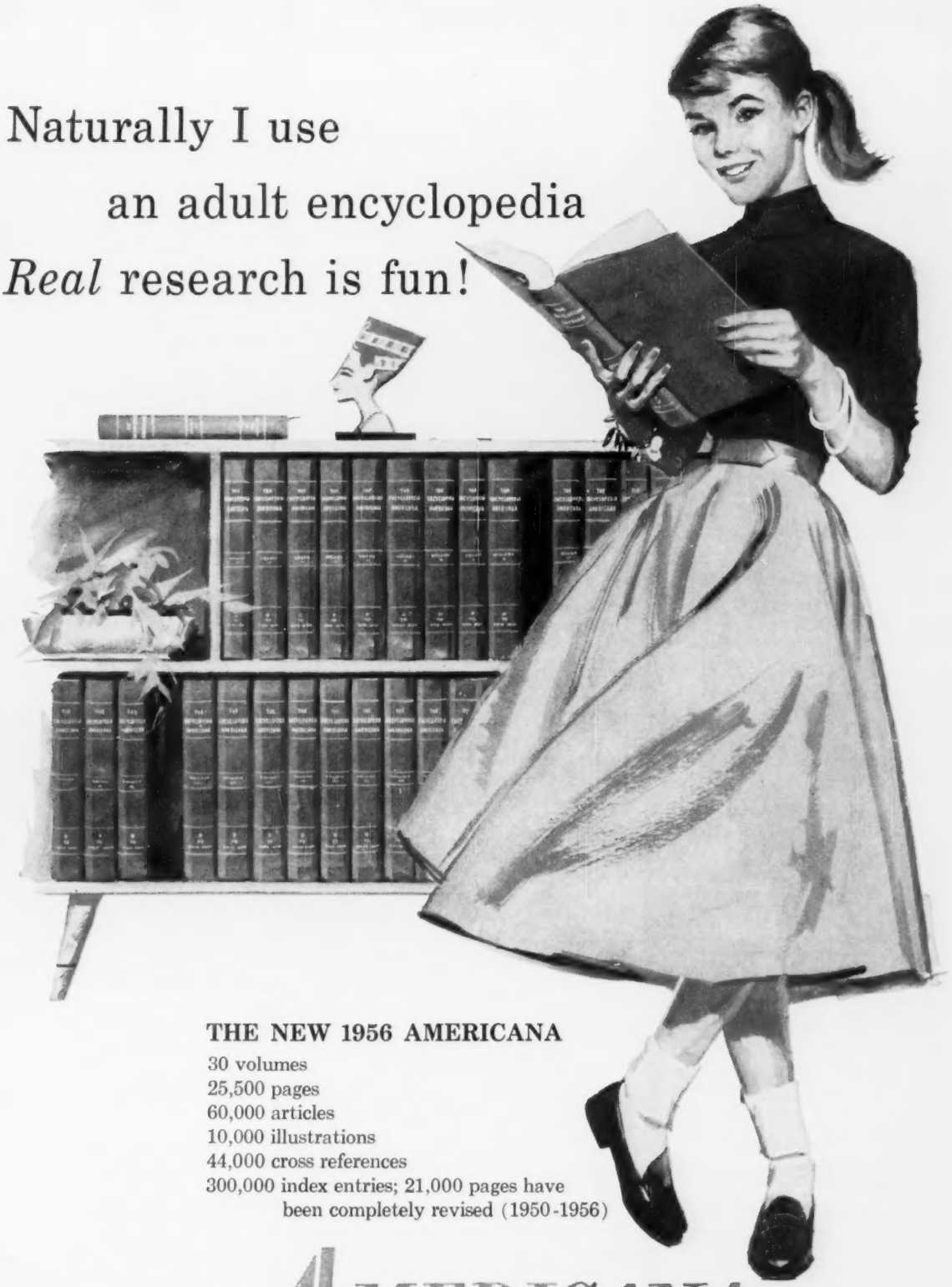
Also available with plastic surface.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated

SILER CITY • NORTH CAROLINA

Naturally I use
an adult encyclopedia
Real research is fun!



THE NEW 1956 AMERICANA

30 volumes
25,500 pages
60,000 articles
10,000 illustrations
44,000 cross references
300,000 index entries; 21,000 pages have been completely revised (1950-1956)

The Encyclopedia AMERICANA
The International Reference Work

2 West 45th Street, New York 36, N.Y. ©Americana Corporation, 1956

THESE THREE WEBER COSTELLO CHALKBOARDS ARE

At the Head of the Class!

Hyloplate

Fully cushioned, laminated wood fibre construction. Uniform, resilient matte surface for smooth writing and easy erasing. Refreshing green Litesite surface or black.

Sterling

A mineral type, cement-asbestos chalkboard with excellent surface, that is "friendly" to chalk and erases with minimum effort. Refreshing green. Litesite surface or black.

Hyloprest

Hardboard backing with smooth composition writing surface. Compatible with chalk and yields readily to eraser. Same quality as Hyloplate, but with ultra-strong chalkboard body. Refreshing green Litesite surface or black.

Hyloplate, Sterling and Hyloprest are Highest Grade Chalkboards. Weber Costello Standard and Economy Grade boards are available if budget limitations necessitate chalkboard economy.
WRITE FOR CATALOG BN-26

WEBER COSTELLO COMPANY
CHICAGO HEIGHTS, ILL.
Manufacturers of:
Chalkboard • Chalk
Erasers • Art Materials
Maps • Globes

Typewriter Stand Is Adjustable in Height

Speed and efficiency can be increased and fatigue eliminated when the typewriter is at the proper working level for



pupils. Adjustments are quickly and easily made by turning the "Fold-Away" adjusting knob located beneath the right front corner of the new Hardware Engineering Adjustable Typewriter Stands. There are no exposed moving parts in the adjusting unit which permits four inch adjustments.

Made of brazed one inch steel tubing, the stand is sturdily constructed for hard use. Tops are furnished in "Duron" and are also available in Fiberesin plastic or hard maple. Adjusting glides keep the table level on any floor. **Hardware Engineering Co., Inc., Metal Furniture Div., Garrett, Ind.**

For more details circle #721 on mailing card

Attractive Patterns in Melmac Dinnerware

Arrowhead Melmac chip-and-break resistant dinnerware is now available with attractive, colorful patterns. The wide rim is decorated with a vine pattern in soft shades of green and yellow or red and gray on white in the Vine pattern. Other patterns in combinations of colors are also available. The patterns are applied under the finish by a special process which makes them an integral part of the dinnerware and cannot wear off. **International Molded Plastics, Inc., 4387 W. 35th St., Cleveland 9, Ohio.**

For more details circle #722 on mailing card

Shower Control Unit Is Self-Contained

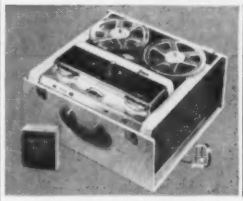
The Leonard G. S. Control Unit is a self-contained water temperature control for school showers. The preassembled, factory-tested unit is ready for immediate installation. All necessary fittings are assembled in a locked, vandal-proof steel cabinet with a removable black Formica panel board. Three couplings make up the plumbing connections and all parts can be easily replaced on the job if necessary, without disturbing pipe connections. The G. S. unit is available for six standard sizes for group or gang control in modern cabinets finished in colors. **Leonard Valve Co., 1360 Elmwood Ave., Cranston 7, R.I.**

For more details circle #723 on mailing card

(Continued on page 210)

New PENTRON *Emperor*
3 2+1 SPEAKER
HIGH FIDELITY
TAPE RECORDER

. . . with UniMagic Control!



$249.50 list
OTHERS $139.95 to $595.00

"Roving" tweeter in separate baffle plus 2 speakers in recorder for stereophonic sound. 10-watt push-pull amplifier. VU meter. Automatic index counter.

Write for new literature on *Pentron's full line!*

120-55

PENTRON

PENTRON CORPORATION
766 S. Tripp Avenue
Chicago 24, Illinois

Burke
BETTER-BUILT EQUIPMENT
. . . for PLAYGROUND, RECREATION, SPORTS
. . . tops in Quality • Safety • Service

Heavy-duty Playground Equipment . . . and Park Benches • Picnic Tables • Portable Prefabricated All-Steel Platforms and Bleachers • Bicycle Racks • Offset Basketball Backstops . . . and other recreational and sports equipment.

Use the Burke personalized planning and advisory service at no cost or obligation. Write for complete information, about products and name of nearest dealer.

THE J. E. BURKE COMPANY
NEW BRUNSWICK • N. J.
FOND du LAC • WIS.

Here's a NEW liquid cleaner for better floor care!



Big benefits cause rapidly growing customer demand for Wyandotte...

UNIVERSAL LIQUID CLEANER

There's nothing to compare with Wyandotte Universal Liquid Cleaner. Already—a short four months since it was introduced—it has received widespread customer acceptance.

Universal Liquid Cleaner cleans faster, with no skin irritation, no back-breaking effort. You get *depth cleaning*—thanks to amazing Ammosene . . . locked in chemically to give you better cleaning results.

Universal Liquid Cleaner is practically neutral—safe on all surfaces that water alone will not injure.

Universal Liquid Cleaner is full-bodied, concentrated—makes high, long-lasting suds . . . contains no soap. It is shipped to you in sealed containers, your guarantee of uniform concentration drum after drum.

If you prefer an effective, hard-working cleaner *in powder form* . . . try Wyandotte's F-100* for cleaning and dewaxing floors, washing walls and painted surfaces.

Call on your Wyandotte man for a demonstration of Universal Liquid Cleaner. While he's there, have him survey *all* your cleaning operations. He carries Wyandotte's *complete line* of specialized cleaning products—and his tips can save you money.

*REG. U.S. PAT. OFF.

Gives you all these benefits:

- **Neutral**
  —Safe on all washable surfaces
- **Greater cleaning power**
  —thanks to amazing Ammosene
- **Easy to use**
  —Cleans safely and thoroughly
- **Rinses easily**
  —Leaves no powdery deposits
- **Safe on hands**
  —Does not irritate the skin
- **Contains no soap**
  —Forms no films

Wyandotte CHEMICALS J. B. FORD DIVISION

WYANDOTTE, MICHIGAN • ALSO LOS NIETOS, CALIFORNIA • OFFICES IN PRINCIPAL CITIES

8¢ profit from a 10¢ sale!



It's easy with a

CRETORS Popcorn Machine!

Make those crowds produce extra funds for your school with a CRETORS Popcorn Machine . . . No other food item is so popular as popcorn. No other money-making enterprise gives your school such a high return, and you can sell wholesome, nutritious popcorn to your students and friends with pride, because popcorn is a healthful food . . . Write for the money-making details. Delayed payment plans available.

Complete line of floor and counter model popcorn machines for all schools. Earning capacities from $12 to $75 an hour.

Cretors Popcorn Machines Since 1885

Styled for Sales / Engineered for Profits

SALES OFFICE: Cretors, Popcorn Bldg., Nashville, Tenn. • **FACTORY:** Chicago, Ill. Distributors Coast to Coast • **IN CANADA:** Super Puff't, Ltd., Toronto Theatre Confections, Ltd., Toronto • Service Confections, Ltd., Winnipeg

What's New . . .

Full Line of Floor Machines in Floorcraft Line

The new KR DeLuxe series of floor machines rounds out the General Floorcraft line to include all types. Two



standard sizes are available in the new units, KR-14 and KR-16. The new machines have left and right hand safety-switch lever, fully adjustable handle, large six inch retractable wheels with semi-automatic tires, precision transmission, wrap-around protective white rubber guard and all chrome or polished aluminum finish. The new tires make the machines easy to roll and facilitate transport of the machine in up or down position, even up and down stairs.

The powerful, quiet gear reduction unit eliminates vibration and provides long trouble-free service. The KR-14 comes with ⅓ or ½ h.p. repulsion induction motor and 40 or 50 foot cable. The KR-16 is available with ½ or ¾ h.p. and 50 foot cable. Also available for the new models is newly designed floor scrubbing and rug shampooing equipment. **General Floorcraft, Inc., 421 Hudson St., New York 14.**

For more details circle #724 on mailing card

Plastic Glazing Material Reduces Window Breakage

Reduced window breakage and maintenance problems are advantages claimed for the use of a new glass-fiber reenforced plastic glazing material. Designated as Structoglas, the new material is shatterproof, weather resistant and extremely lightweight. It can be installed quickly, easily and safely. Its high impact strength facilitates handling and lengthens its life.

For use in basement windows and other areas where breakage from impact is a problem, the new translucent glazing material also provides superior insulating qualities, thus effecting savings in heating and air conditioning costs. Structoglas glazing is available in green, blue or clear translucent color. It has a "pebble-grain" surface and panes are supplied in standard sash sizes. **Structoglas Division, International Molded Plastics, Inc., 4306 W. 35th St., Cleveland 9, Ohio.**

For more details circle #725 on mailing card

(Continued on page 212)

For the sewing class that's a growing class . . .
SINGER Combination Sewing and Cutting Table!

Accommodates More Students!

Designed with the help of leading home economics supervisors, the new two-in-one SINGER* Sewing Table accommodates *four* students at the same time.

It holds any combination of 2 full-sized SINGER* Machines and provides working space for two more students. With complete sewing needs right at hand, students never have to wait for work space!



Fits more machines into limited space!

Now there's no need to waste space with *separate* machine cabinets and cutting tables. Machines lower into the SINGER Table . . . removable panels slip into place . . . and presto!

There's a smooth, continuous surface for pattern pinning and cutting! Students needn't shift from machines to cutting tables. Noise and confusion are eliminated . . . teaching is more *efficient.*



Has all these convenience features!

- Two handy drawers—plus two deep openings to accommodate all standard tote trays.
- Drop leaf for extra space. (Second leaf available for other end if desired.)
- Built-in knee levers.
- All metal parts grounded.
- Safety switch—cuts off power automatically when machines are lowered into table.
- Dustproof shields—completely enclose machines when not in use.
- Tamper-proof locks on panels.
- Table available in beautiful blond or dark wood.
- Durable "Formica" top, choice of blond, dark or different colors.
- Size—60" x 42" x 30" with 18" drop leaf.

Special school discount

with any full-sized SINGER heads you prefer —Straight-Needle, Slant-Needle* or Swing-Needle.*

For free folder

giving specifications and suggested classroom layouts, just mail this coupon.

SINGER SEWING MACHINE CO.
Educational Dept., 149 Broadway, N.Y. 6, N.Y.

Please send folder giving details about Combination Sewing and Cutting Table, and showing suggested classroom layouts.

Name_____

Position_____

School_____ **County**_____

Street_____

City_____ **Zone**____ **State**_____

SINGER SEWING CENTERS

THERE'S ONE NEAR YOUR SCHOOL

*A Trade-Mark of THE SINGER MANUFACTURING COMPANY.

What's New ...

Water Cooler Features Dual-Control

Both hand and foot operation are now included in a new Dual-Control Sunroc



Water Cooler. The new feature is available on all standard type Sunroc Coolers, according to the announcement. Drinking water is properly cooled by the Sunroc coil-cooling method and is dispensed by either the new push-button bubbler or by slight pressure on the heavy-duty foot pedal which is removable if hand operation only is desired.

The Sunroc Foot Pedal is constructed of heavy gauge stainless steel. The pedal is extra wide for efficient operation and can be raised for thorough cleaning of floor areas around the base of the cooler. The pedal itself is easily cleaned as it has no corners or crevices. The new Dual-Control cooler can be equipped with a glass-filler that is independently operated by a push-button control. **Sunroc Corporation, Glen Riddle, Pa.**

For more details circle #726 on mailing card

Audio-Visual Programs Employ Television Facilities

The new Dage Audio-Visual Integrated Television System is designed to provide more efficient and flexible use of audio-visual aids to help relieve the demands on present and future classroom facilities. Called "DAVITS," the plan is based on the use of a central point to originate all audio-visual activities with audio-visual impressions transmitted to one or many classrooms over closed-circuit television. Demonstrations for laboratory or classroom, films and slide programs can be televised through the system, making it necessary to use only one teacher or operator for the particular program.

The closed-circuit television system was developed as a means for making more efficient use of audio-visual aids with lessened costs of equipment and operation. **Dage Televsion, Division Thompson Products, Inc., Michigan City, Ind.**

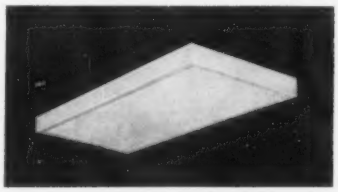
For more details circle #727 on mailing card

(Continued on page 214)

Shallow Fluorescent Fixtures for Lower Ceilings

The new extra-shallow Surf-A-Lite fluorescent fixture is designed for flush-to-ceiling mounting in areas with low ceiling heights. Just 3½ inches high, the new Surf-A-Lite is offered in 12, 17 and 24 inch widths. It can be mounted in continuous rows, in pattern groupings or individually, without any additional accessories. Flush fixture-to-fixture mounting is possible because of the rectangular cross-section.

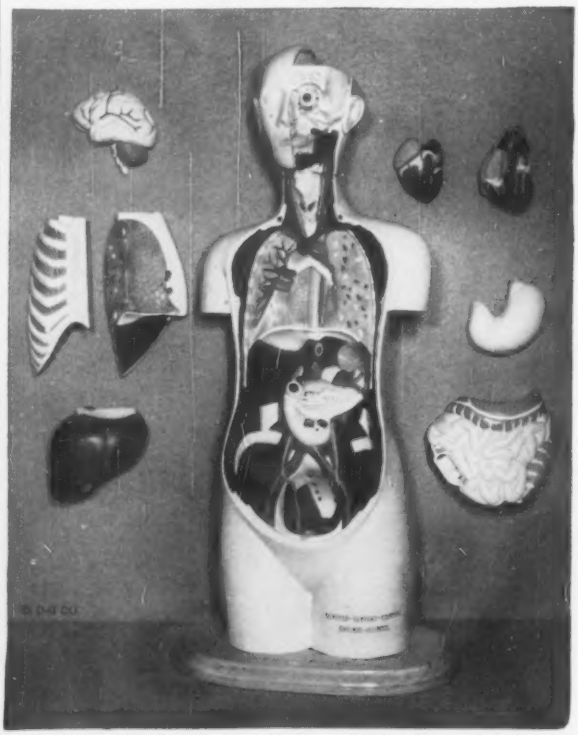
The luminous bottom of the Surf-A-Lite has no dark islands and the Electro Silv-A-King ½ inch square "Poly-cube" polystyrene louver provides 45 by 45 degree shielding. A variety of flat glass diffuser bottoms is available on order.



The "Magic Frame" door is easily inserted and removed without tools. The unit is designed for ease of installation and maintenance. **Electro Silv-A-King Corp., 1535 S. Paulina St., Chicago 8.**

For more details circle #728 on mailing card

presenting A NEW HEAD and TORSO MODEL



No. Y109R

in resilient unbreakable plastic

Where study of human body structure and function does not demand as thorough coverage of subject as our more complete plastic models provide, the new **Y109R** is ideal.

All ten parts are carefully engineered for convenient handling in actual classroom activities.

Y109R is the first unbreakable plastic torso and head model priced **below $200.00 ! !**

For more detailed information and prices, write to us and ask for Circular 88.

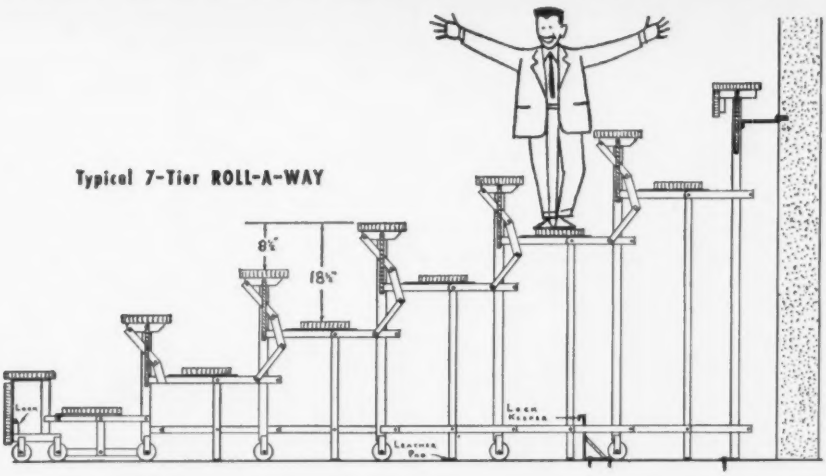
DENOYER-GEPPERT CO.

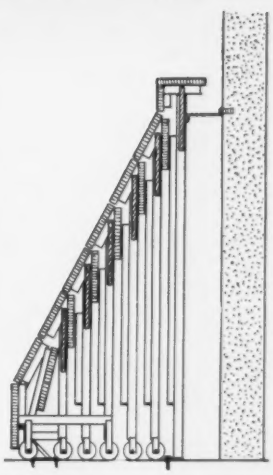
5235 Ravenswood Ave., Chicago 40, Ill.

. . . for the finest in visual teaching appliances— —since 1916—



WANTED: MAXIMUM SEATING in MINIMUM SPACE





Read how this school solved its Gymnasium Seating Problem with *Universal* Roll-A-Way Bleachers

Is it possible to have gymnasium bleachers that meet all demands... for comfort as well as maximum seating in minimum space? Here's what J. W. Davidheiser, secretary, Middletown Township Public Schools, Leonardo, New Jersey, has to say:

"We at Middletown had a problem of space. We wanted a bleacher that could fit our needs and still give us maximum seating without losing any of the advantages. We inspected several types of bleachers installed in other schools and learned their weaknesses. We then specified and bought Universal Roll-A-Way Bleachers because they offered more leg room than any other brand. The Universal Bleacher Company installed them in a most satisfactory manner and we are more than pleased."

You can sit on *Universal* Roll-A-Ways in a natural, comfortable position. The extra distance from seat board to foot board (18½") and the position of the vertical filler (centered under seat) assure maximum space per spectator... permitting normal positions of feet drawn back under seats. Yet, when not in use, these bleachers may be rolled back to the wall, opening approximately 70% more floor space for regular gymnasium activities. Write today for free catalog. No obligation.



This Experienced Man

... H. D. Baltimore, covering central New Jersey for American Seating Company, Philadelphia ... is one of many *Universal* representatives throughout the nation who will be glad to show you the superior advantages of Roll-A-Way Bleachers. Don't hesitate to call for the representative in your area.

UNIVERSAL BLEACHER COMPANY

Champaign, Illinois • *Representatives in principal cities*

What's New ...

Hot Chocolate Unit for Coffee Vendors

Chocolate and coffee can be delivered from the same dispenser when the new



Mills Hot Chocolate Unit is installed on any coffee service vendor already in operation. Different discharge ports are provided to eliminate the possibility of mixing ingredients. The new unit is easily and quickly installed on any operating vendor.

Dry powders are blended in the cup to do away with mixing pots and tubes and thus reduce cleaning procedures. The unit provides a flavor and quality control button for selection of sugar and cream. A simple, rugged toggle switch controls selection of coffee or chocolate. **Mills Industries, Inc., 4235 W. North Ave., Chicago 39.**

For more details circle #729 on mailing card

Liquid Cleanser Sanitizes Vitreous Ware

All vitreous ware can be cleaned, sanitized and deodorized in one operation with the new Holcomb Zen liquid cleanser recently introduced. Its dual action of detergent and acid results in unusual cleaning speed. Tests indicate that it quickly removes even stubborn stains and discolorations from toilets, urinals and other vitreous wear. The non-fuming cleanser is pleasantly scented and will not sting or smart the skin. A special inhibitor contained in the cleanser protects plumbing.

The new cleanser is supplied with a quart polyethylene dispenser bottle with no-drip pouring spout. The dispenser will not break and is designed to prevent slipping from the user's hands. The cleanser is shipped in quart bottles with yarn swabs. Air vents in the dispenser prevent splashing and the pouring spout directs the liquid to the swab without waste. **J. I. Holcomb Mfg. Co., 1601 Barth Ave., Indianapolis 7, Ind.**

For more details circle #730 on mailing card

Quarry Tile Now Available in Bluegrass Green

An addition to the line of ceramic tile products offered by Mosaic Tile Company is the new Bluegrass Green Quarry Tile. The bluish green effect in the new tile can neither fade nor wear off since it completely permeates the product. Heavy traffic floors of the new tile will thus keep their attractive color even after long wear. The new color harmonizes with other tile shades and provides a neutral background for furniture and furnishings. **The Mosaic Tile Company, Zanesville, Ohio.**

For more details circle #731 on mailing card

Advanced Electronics Kit for "Visual Experiment"

Kit Model 53 covers Electronic Tubes, Circuits and Devices and is designed as a "visual experiment" kit for upper high school and junior college teaching of electronics. It is designed to simplify the teaching of electron tube theory, radio transmitting and receiving, industrial electronic controls and basic radar and television. The "learn-by-doing" technic is employed to stimulate student interest and to make teaching easier and more effective.

Model 53 has 108 component parts to permit students to build operating assemblies. Construction of magnetic am-



plifiers, photo-electric controls, flip-flop circuits, electronic counting circuits and many other assemblies is possible with the 73 related experiments. A 400 page work manual is included with each kit, permitting instructors with limited technical training to teach the course. **Crow Electri-Craft Corp., Div. of Universal Scientific Co., Inc., Vincennes, Ind.**

For more details circle #732 on mailing card

Auxiliary Tank Kit for Vacuum Cleaners

Additional wet or dry tank capacity can be added to conventional vacuum cleaners with the new auxiliary tank kit. All attachments necessary to convert a standard 30 gallon waste can into an auxiliary tank are included in the kit. The auxiliary tank can be left in the furnace room for boiler cleaning and the vacuum attached when necessary. It can also be used for cleaning in hazardous areas with the vacuum unit, with separately ventilated motor, left outside. The unit is interchangeable with two or more cans and operates with any commercial cleaner. **Premier Company, 755 Woodlawn Ave., St. Paul 1, Minn.**

For more details circle #733 on mailing card

(Continued on page 216)

HAIRPINLINE COLD CATHODE



LOW BRIGHTNESS — LONG LIFE

1. Cold Cathode is designed to outlast all other lamps 5 to 1.
2. Low-brightness lamp eliminates louvers.
3. Eliminates vacuum-cleaner cleaning of fixtures.
4. Eliminates scrubbing of louvers.
5. Eliminates continuous lamp changing.
6. Three-year unconditional lamp guarantee against burnouts.

SEND FOR FREE COPY OF OUR BOOKLET

FACTS ABOUT COLD CATHODE FOR SCHOOL LIGHTING

ILLUMINATING ENGINEERING COMPANY

2347 E. NINE MILE ROAD, HAZEL PARK, MICHIGAN



NORTON DOOR CLOSERS STILL IN DAILY USE AFTER 32 YEARS OF CONTINUOUS SERVICE IN CHICAGO'S FAMOUS *London Guarantee Building*



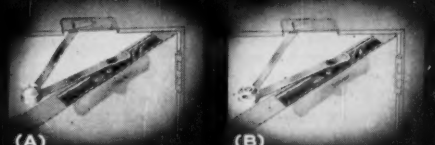
Surface type Norton Door Closers installed as original equipment in 1923 are still serving faithfully

AND NOW— the same rugged dependability plus streamlined modern design is available in

NORTON "INADOOR"

The truly modern concealed door closer built for heavy duty reliability





(A) (B)

Available with (A) regular arm and (B) holder arm . . . 4 sizes to meet all requirements

Only The "INADOOR" has all these top-quality NORTON features.

Rack and Pinion Construction gives uniform, positive checking at every point!

New Aluminum Shell for lighter weight, robust wear. Proved by use on our surface closers for over 7 years.

Special Spring—of highest quality steel!

Non-Gumming, Non-Freezing Hydraulic Fluid permanently lubricates every inside moving part!

Double Adjusting Levers, easily moved by fingers, control speed of closing action and latching action!

Regular Arm Series and Holder Arm Series—the latter especially suited for hospital use! Famous Guarantee! For 2 full years, providing recommended sizes are used!

Write today for FREE CATALOG on full Norton line of concealed and surface door closers.

NORTON®

DOOR CLOSERS

75 years of leadership in door closers

Dept. NS 36
Berrien Springs, Michigan

What's New ...

Classroom Radio Has AM and FM Circuits

An improved model of the Freed-Eisemann "Educator" classroom radio is



now available from the Electronics Division of Fairchild Controls Corporation, successor to the original producers. Every educational and commercial AM and FM broadcasting station in the listening area of the school can be brought in with the "Educator" Model 155. It spans the full range of broadcasting frequencies assigned by the FCC for Frequency Modulation and Standard Broadcast. Twelve electronic tubes permit separate circuits for AM and FM sections.

Sufficient volume is provided for easy listening in the largest classroom or auditorium through high power output. The 8 inch speaker is a heavy duty model. A revised edition of the pamphlet, "Perfect Classroom Reception," is also available for distribution and deals with the subject of classroom radio receivers. **Electronic Division, Fairchild Controls Corp., 200 Hudson St., New York 13.**

For more details circle #734 on mailing card

Operating Improvements on Ditto Duplicator

The Ditto D-10 Direct Process Duplicator is offered in an improved model. A three-digit reset counter and positive margin adjustment facilitates systems duplicating and registering on pre-printed copy forms. Up to 999 copies are automatically counted by the new reset counter when the machine is in operation. A nickel-plated fluid tank and a slotted drum for magnetic blockout work are other new features of the low-cost model.

The hand-operated duplicator with automatic paper feed produces up to 120 copies a minute in as many as five colors at the same time. **Ditto, Incorporated, 2243 W. Harrison St., Chicago 12.**

For more details circle #735 on mailing card

Relief Map of Canada Printed in Eight Colors

Eight vivid naturalistic colors are used in printing the large new relief map of Canada. The Vinylite plastic map is 49 by 45 inches in size. The plastic is vacuum formed to show mountains, valleys and drainage patterns in clear relief. Land-use colors employed include an icy blue for snow covered areas, lavender for tundra, tan earth color for cultivated lands and other suggestive colors for other indications. The colors are protected by plastic coating and the map may be marked with soap crayons or china marking pencils without damage. Marks, fingerprints and dust are easily wiped off the coated surface, according to the manufacturer.

The new map has over 3,000 geographical names and shows land forms



and land use. It shows all airports, both land and water, and major highways and railroads. **Aero Service Corporation, 210 E. Courtland St., Philadelphia 20, Pa.**

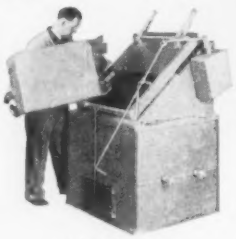
For more details circle #736 on mailing card

(Continued on page 218)

SCHOOL INCINERATOR

—Pays for Self in 6 to 12 Months

—Burns Wet or Dry Refuse



Model C-10 with Guillotine door, special equipment.

Winnen School Incinerators save more than their cost in refuse hauling charges within the first six to twelve months, according to thousands of satisfied users. Burn wet or dry refuse, or mixed. Choice of fuels. No fuel needed to burn dry refuse. Oversize feed doors permit you to feed crates and boxes without breaking them up.

Winnen Incinerators can be installed indoors or out, take up little space. Grates are heavy gray-iron castings. You never have to "fish out" cans or non-combustibles through the feed doors. The grates dump completely. Combustion chamber is lined with heavy refractory material, shell is heavy galvanized steel. Optional equipment is available, such as prefab chimney, automatic fuel control, etc.

Two styles. The Model C is available in 4, 10, 15, 20 or 30 bushel sizes. It is ideal for burning refuse that does not create smoke and odors. The Model C-2 is available in four sizes and is equipped with a secondary combustion chamber for smokeless and odorless operation. Ideal for use in or near municipalities where all smoke and odor must be eliminated, the Model C-2 conforms to the most rigorous building codes everywhere. Fully guaranteed one year!

Winnen Incinerators are shipped knocked down with complete, easy-to-follow directions for installing. Any handy man can set up a Wincinator quickly. No mason needed. Easy to relocate later if you wish.

Send for literature and prices. No obligation. Write today to: ***Winnen Incinerator Co.,*** 932 Broadway, Bedford 27, Ohio.

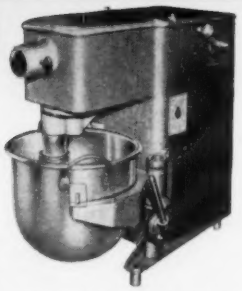
univex
FOOD MIXER

$375.00

Model 1222

(Complete Beater, Whip & Bowl)

- *22 qt. capacity*
- *Automatically Timed*
- *Change speeds without stopping*
- *Compare load capacity. Mix 24 lb. pizza or bread dough — whip potatoes, cream etc.*



Price Slightly Higher in West

UNIVEX MIXER STANDS AND ATTACHMENTS

Mixer Stand



$35.00-A240 *(open type)*

Cabinet Mixer Stand



$50.00-E240 *(cabinet type)*



Meat & Food Chopper **$46.00**



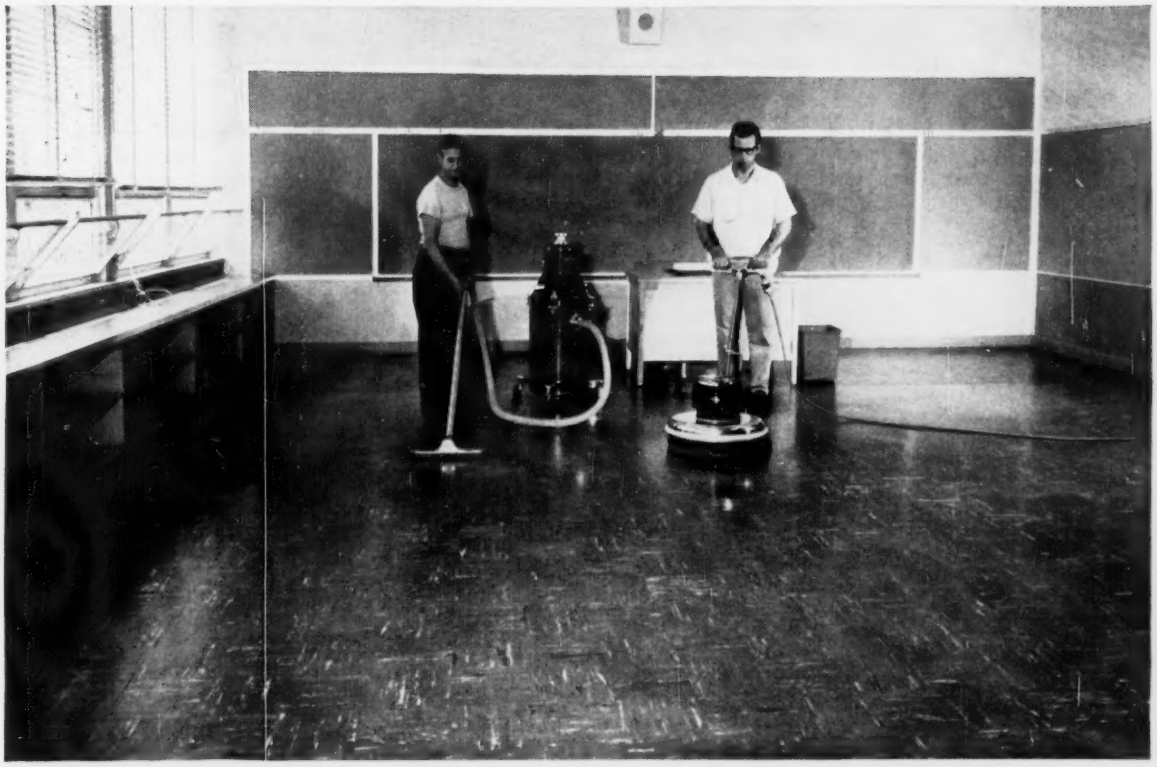
Vegetable Slicer **$85.00**



Knife & Tool Sharpener **$65.00**

UNIVERSAL INDUSTRIES

378 MYSTIC AVE., SOMERVILLE 45, MASS.



Long Island Schools Cut Floor Maintenance Time and Costs with MULTI-CLEAN Equipment

This classroom floor of gleaming asphalt tile is in the East Lake Grade School, Massapequa Park, Long Island, New York. The school is one of four in the system using MULTI-CLEAN 16″ and 22″ floor machines and MCV-220 industrial vacuum cleaners.

"Bud" Jesseau, superintendent of buildings in this modern school system says, "Our MULTI-CLEAN equipment is tops, and since we've been using it, we've cut our maintenance time and labor costs considerably.

"We wax and burnish our floors three times a year, and daily maintenance during the school year requires only damp mopping. It's as simple as that with the MULTI-CLEAN METHOD and our floors keep their clean and polished appearance all the time."

For more information about the MULTI-CLEAN METHOD of floor care, mail the coupon below. Your local MULTI-CLEAN distributor will be glad to help you with any floor problem without obligation.



MULTI-CLEAN PRODUCTS, INC. Dept. NS-36
2277 Ford Parkway, St. Paul 1, Minnesota

Gentlemen: I'd like floor maintenance information on: ☐ Concrete, ☐ Asphalt Tile, ☐ Terrazzo, ☐ Wood, or _____. Also literature on: ☐ Floor Machine, ☐ Scrubbing Machine, ☐ Industrial Vacuum Cleaner.

Name _____ Title _____

_____

Address _____

City _____ Zone ___ State _____

What's New ...

Six Decorations on Double-Tough Dinnerware

Corning Double-Tough brand dinnerware is now available with a decorated



sprayed border in any of four new colors. These supplement the regular line with maroon or green banding, making six decorative effects available for harmonizing with school lunchrooms or dining rooms. The new border colors are gray, coral, autumn and aqua.

Double-Tough brand dinnerware is made to withstand chipping and breakage even under heavy use. Drop tests and rim-impact tests have been made to indicate the unusual strength of the dinnerware. It is made without surface glaze, which eliminates the possibility of surface cracking or crazing by high temperatures in dishwashers and driers. The line now includes six different sizes of bowls, three sizes of dinner plates, two of bread and butter plates, two creamers, two saucer sizes, a boullion or egg cup, a compartment plate, a cup and a beverage mug, a ramekin, a salad plate and a sauce dish. **Corning Glass Works, Corning, N. Y.**

For more details circle #737 on mailing card

Whip Cake Topping Has Creamy Taste

Creamy taste, appearance and consistency are offered in the new whip topping for cakes and pies. Known as "Top Kick," the product requires no refrigeration of containers in storage and will not sour or spoil. It is packed in No. 10 tins and is ready for use when needed. It should be stored under refrigeration after opening. "Top Kick" is made by adding one part of regular liquid milk to two parts "Top Kick" and beating with a wire whip in mixer. Light or heavy cream may be folded in for a richer product. **S. Gumpert Co., Inc., 812 Jersey Ave., Jersey City 2, N. J.**

For more details circle #738 on mailing card

Gas and Gas-Oil Burners in Four Unit Models

Fully assembled, wired and tested gas and gas-oil burner units in four new models were recently announced. The gas burners are available in capacities ranging from 500,000 to three million BTU input. They are designed to fire with natural gas only. The combination gas-oil burners fire at rates of from five to twenty gallons of oil per hour. All necessary controls, including an electronic combustion control system, are supplied in the package units. All four new burners are Underwriters Laboratories approved, according to the manufacturer. **Iron Fireman Mfg. Co., 3170 W. 106th St., Cleveland 11, Ohio.**

For more details circle #739 on mailing card

Flexible Arm Lamp Has "Kold" Shade

The new Faries adjustable incandescent lamp for close work features the new "Kold" shade. Users are protected from burns since even after continuous burning of a 100 watt bulb, the outside shade is cold to the touch. The flue effect of the shade draws off the heat with a fast up-current. A new method of radiation and reflection also eliminates heat in the "Kold" lamps. The Faries new universal



"Friction Free" adjustment employs the gravity principle giving virtually unlimited frictionless adjustments. The new lamp arms extend from 12 to 38 inches and lamps are available in a total of eight types in both fluorescent and incandescent. **Faries Lamp Division, Elwood, Ind.**

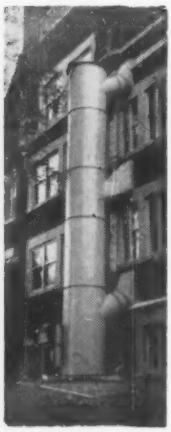
For more details circle #740 on mailing card

Heavy Duty Wall Covering in Colors and Designs

The new Guard line of heavy duty wall covering introduced by Columbus Coated Fabrics is offered in a variety of colors and designs. The line is practical for wall covering in service areas such as corridors, elevator fronts, stairways and other traffic locations. The new colors and designs are co-related with the colors and designs of the washable wall canvas, Wall-Tex. The two products can be used effectively together, the heavy-duty Guard vinyl wall covering below a molding, chair rail or dado with the Wall-Tex above to complement or contrast the color tones. **Columbus Coated Fabrics Corp., 1280 N. Grant Ave., Columbus 16, Ohio.**

For more details circle #741 on mailing card

(Continued on page 220)



Spiral Type

POTTER Slide Fire Escapes

Do provide a safe and quick means of exit in an emergency. This has been proven in 30 instances in which they have been successfully used under actual fire conditions.

Adaptable to all types of occupancy and for installation on the interior as well as the exterior.

Return the coupon below for information and a representative if desired.



Tubular Type

Tested and Listed as Standard by Underwriters' Laboratories, Inc.

POTTER FIRE ESCAPE COMPANY, CHICAGO 45, ILL.

☐ Mail copy of new catalog.

☐ Have fire escape engineer call with no obligation.

Submit estimate and details on.....escapes.

Signed.....

Address.....

City.....

Gold Seal BRINGS YOU "YEARS AHEAD" FLOORS...



"SCHOOLROOM PROGRESS USA"†

dramatic showcase-on-rails of the most modern school facilities, selected Gold Seal Floors exclusively! This famous traveling exhibit contrasts schools of yesteryear with the very latest in school design and equipment. Displayed in the "new" railroad car are five American Institute of Architects award-winning classrooms—each with the Gold Seal floor ideally suited to room function and decor. "Schoolroom Progress USA" will visit 40 cities annually during the next 3-5 years. See it when it comes to *your* city!

†*Sponsored by The Henry Ford Museum and Greenfield Village and Encyclopedia Americana.*



Gold Seal ⅛" Inlaid Linoleum with contrasting alphabet insets.

...WITH OLD-FASHIONED RUGGEDNESS!



53-YEAR OLD Gold Seal Battleship Linoleum on the main staircase of O'Kane Hall, Administration and Faculty Housing Building.

Over half a century and still in service!
That's the amazing record of this Gold Seal Inlaid Linoleum installed at The College of The Holy Cross, Worcester, Mass. Father Sullivan, Director of Purchases, writes: "Gold Seal Battleship Linoleum was originally installed in O'Kane Hall in 1903. In 1938 it was taken up and re-installed with black borders on stair treads of the main staircase. It's still there—and in good condition!"

New Exclusive Gold Seal ⅛" Sequin* Inlaid Linoleum
—Now you can have all the durability of heavy-duty linoleum in new decorator-selected design and colors. Rugged abrasion tests have proved that the new design and colors will *stay* sharp and clear through long years of wear. Its all-over pattern hides scuff marks. The smooth surface seals out dirt, resists stains, is easy to maintain. Highly resilient—it's quiet and comfortable underfoot. See new ⅛" "Sequin" at your Gold Seal Dealer.

SPECIFICATIONS for Gold Seal ⅛" Inlaid Linoleum: 6-ft. wide yard goods. ⅛" gauge, burlap backed. Install over suspended wood or concrete. 7 colors.

*Trademark

FOR HOME OR BUSINESS:

INLAID BY THE YARD—Linoleum • Nairon* Standard • Nairontop*
RESILIENT TILES—Rubber • Cork • Nairon Custom
Nairon Standard • Vinylbest • Linoleum
Ranchtile® Linoleum • Asphalt
ENAMEL SURFACE FLOOR AND WALL COVERINGS—Congoleum® and Congowall®
RUGS AND BROADLOOM—LoomWeve*

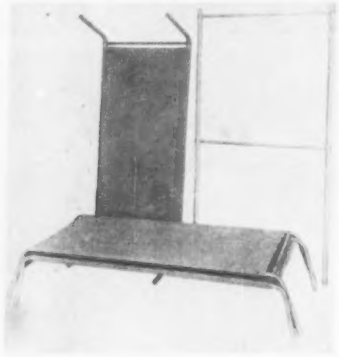
©1956 CONGOLEUM-NAIRN INC. • Kearny, N. J.

FOR THE LOOK THAT'S YEARS AHEAD
Gold Seal® FLOORS AND WALLS

What's New ...

Nesting Cots for Kindergarten Pupils

Pacific Shaw kindergarten cots are designed for easy nesting. They are



light in weight and easily set out for kindergarten rest periods or stacked without effort when not in use. The sturdy aluminum side rails are of one inch tubing with cross rails of ⅝ inch tube.

A wide range of colors is used in the canvas covering on the cots to brighten the nursery school or kindergarten room. The colorful canvas covers are of heavy army duck, Vivatex finish, water and mildew repellent and Sanforized. All seams are double-sewn with lock stitch for strength in wear and washing. Slip fittings at the foot end permit easy removal of the covers for laundering. **The Pacific Shaw Co., P. O. Box 870, Portland 7, Ore.**

For more details circle #742 on mailing card

Visibility and Safety in Step Plate for Buses

The white safety edge on the Rub-Bub Safety Step Plate for school buses calls attention to the step, thus affording extra protection to pupils. The step plate gives a non-skid protection even when wet and the resilient live rubber edge helps prevent injuries to shins and ankles.

The new Safety Step Plate is based on the same design principles and made of the same material as the Rub-Bub Step Plate but has the added safety features. It also prevents dangerous and unsightly broken step edges as it is designed to outlast the life of the bus because of its high abrasion resistance. Made of 3/16 inch thickness of resilient white rubber on the step edge and the same thickness of black synthetic Rub-Bub compound on the step tread, the plate is integrally molded in one piece and bonded chemically and mechanically to a rigid punched metal backing covered with a neoprene coating. The new step is available for older vehicles. **Samuel Moore & Co., Mantua, Ohio.**

For more details circle #743 on mailing card

(Continued on page 222)

Milk Can Cart Facilitates Dispenser Loading

Handling and lifting of bulk milk cans for dispensing milk in vendors is minimized with use of the new Meterflo Milk Can Cart. It is designed for use in loading all floor model Meterflo Bulk Milk Dispensers and easily transports five or ten gallon dairy cans from storage room or truck to the dispenser. A roller type elevator raises the milk can to loading position at the dispenser. A hand crank is turned to move the elevator and the can upward for positioning in the dispenser cabinet. Once the can is in position in the dispenser, the cart is backed out and the dispenser is ready. **Meterflo Dispensers, 627 Grove St., Evanston, Ill.**



For more details circle #744 on mailing card



FLAGS FOR SCHOOLS

U.S. AND STATE FLAGS

Dettra—flagmaker to the Nation for 50 years, offers American flags in a wide variety of styles, sizes and materials . . . ideal for schoolroom, assembly hall, playing field.

DETTRA FEATURES

- Famous "Bulldog" Bunting
- Long-Lasting "Dura-Lite" Nylon
- Beautiful, lustrous "Glory Gloss"
- Decorations
- Flag Accessories

ASK YOUR DEALER OR WRITE DETTRA FOR DETAILED DESCRIPTIVE LITERATURE

★ ASK ABOUT DETTRA'S COLOR-SOUND FILM "OUR U.S. FLAG" A wonderful way to tell the story of the flag. ★

DETTRA FLAG COMPANY, INC.
Dept. N, Oaks, Pa.
(Within sight of Valley Forge)

Amazing Grease Remover FOR DEEP FRY EQUIPMENT

KLENZADE DEEP FRY CLEANER

Assures Savory Fried Foods



Eliminates Harsh Abrasive Cleaning

An exceptional detergent for penetrating and removing heavy grease deposits on deep fry equipment, donut machines, ranges, griddles, grills, burners, ovens, exhaust vents, and floors. Possesses powerful saponifying properties for the toughest, greasiest jobs. Rinses thoroughly and leaves clean shining surfaces, especially stainless steel. Removes baked-on film that imparts off-flavors to food. Klenzade Deep Fry Cleaner saves a lot of labor and

Keeps Equipment "Sweet"

KLENZADE

KLENZADE PRODUCTS, INC.
BELOIT, WISCONSIN



Developed as a public service by the Ætna Casualty and Surety Company, the Drivotrainer brings "behind-the-wheel" training into the classroom. Using the instruments and controls of real cars, students learn to meet varying driving problems shown on a motion picture screen at the front of the classroom.

Los Angeles Study indicates Ætna Drivotrainer makes possible . . .

"Behind-the-wheel" training for 50% more students with no increase in teaching staff

In comparison with "car-only" method, Drivotrainer cuts costs — proves superior in developing good driving attitudes—and provides a safe method of training to meet emergencies

High costs and lack of available teachers — these pose an increasingly serious problem to educators considering expanded programs of driver training.

Now, a controlled research study by the Los Angeles City School Safety Section indicates that the Ætna Drivotrainer reduces costs as much as $11.65 per pupil.

Two comparable groups of high school students were used in the study. Briefly, here are the major findings:

1 The Ætna Drivotrainer cuts on-the-road training time 50%

Students in the Drivotrainer group received only three hours of on-the-road instruction as against six hours for the control students. Yet, the two groups showed practically the same progress in driving skill and knowledge.

2 The Ætna Drivotrainer sharply reduces teacher-hours per pupil

By conventional, car-only methods, 4 teachers in Los Angeles could instruct 560 students per year. With a 15-place Drivotrainer, these same 4 teachers could train 840 students—a gain of 50%.

3 The Ætna Drivotrainer produces significant improvement in good attitudes

Drivotrainer students showed definitely greater progress than control students in developing good driving attitudes, as measured by the *Siebrecht Attitude Scale*.

4 The Ætna Drivotrainer safely provides experience in meeting driving emergencies

Through films, the Ætna Drivotrainer confronts students with a wide variety of emergency situations — permits them to gain skill and experience with no danger of being involved in serious accidents.

5 The Ætna Drivotrainer wins student praise

In a questionnaire, 95% of the 113 students in the experimental group stated (a) the Drivotrainer definitely helped them learn to drive; (b) it prepared them to meet on-the-road situations; and (c) they would recommend the Drivotrainer course to classmates.

School systems everywhere can profit by the results of the Los Angeles experimental study. For more detailed information on the study and the Drivotrainer itself, just fill in and mail the coupon below.

ÆTNA CASUALTY
AND SURETY COMPANY
Affiliated with Ætna Life Insurance Company
Standard Fire Insurance Company

Public Education Department NS-1
Ætna Casualty and Surety Company
Hartford 15, Connecticut

Please send me a copy of the Condensed Report on the Los Angeles Study and additional information on the Drivotrainer.

*Name*_____

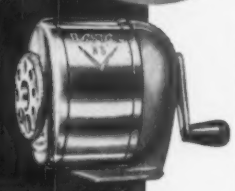
*Title*_____

*Address*_____

*City*_____ *State*_____

What's New . . .

a smart buy to—
SPECIFY BOSTON KS
because . . .



KS—performance record is unsurpassed

KS—lasts longer; 30 cutting edges give 25% more life

KS—smart-looking metal frame is die-cast for ruggedness

KS—no messy fall-out of pencil shavings

KS—Boston Stop stops waste

KS—non-rusting steel receptacle

KS—is guaranteed 1 year, like all Bostons.

king of "heavy duty" sharpeners
SPECIFY BOSTON RANGER
because . . .



RANGER—outside 3-position point adjuster

RANGER—heavy-duty double-bearing design

RANGER—stainless steel receptacle

RANGER—Boston Stop stops waste

RANGER—guaranteed 1 year, like all Bostons.

FREE—*comprehensive school report on sharpeners.*

C. HOWARD HUNT PEN CO.
Camden 1, N.J.

BOSTON PENCIL SHARPENERS

Also mfrs. of SPEEDBALL pens and products

Product Literature

• What every school administrator, architect and educator should know about the new Benjamin Porcenell Chalkboard is told in the **Porcenell Fact Book,** according to information received from the company. Full data on the Porcenell chalkboard, described as being easy to see, easy to write on and easy to erase, is given in the eight page booklet available from Benjamin Electric Mfg. Co., Crysteel Div., Des Plaines, Ill. How this new and different surface is formed, tests conducted under actual use, its advantages and its resistance to damage are some of the points discussed. Summed up on the last page are points covering the significance of the new Porcenell Chalkboard to teachers, students, administrative heads, custodians and to the community.

For more details circle #745 on mailing card

• A new Herman Nelson booklet on all-year cooling is available from Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., 217 Central Ave., Louisville 8, Ky. Entitled **"Amervent Cooling, Heating, Ventilating and Air Conditioning,"** the bulletin discusses models and operation of the Herman Nelson Amervent method of low-cost air conditioning for school rooms. The Amervent is designed for mild climate areas where winter heating requirements are minimized and cooling problems are critical.

For more details circle #746 on mailing card

• A catalog of **White Sewing Machines** suited to classroom use is available from White Sewing Machine Corp., 11770 Berea Rd., Cleveland 11, Ohio. Descriptive information is given on the classroom models and accessories with data on the priority service for school installations.

For more details circle #747 on mailing card

• **Bulletin Board Edition No. 2** issued by National Sanitary Supply Assn., 139 N. Clark St., Chicago 2, discusses the "Causes and Effects" of commonly encountered problems with asphalt and rubber tile floors. Each point is illustrated and problems are discussed. The bulletin measures 17 by 22 inches and can be used as a visual aid in training maintenance employes in proper care of asphalt and rubber tile floorings.

For more details circle #748 on mailing card

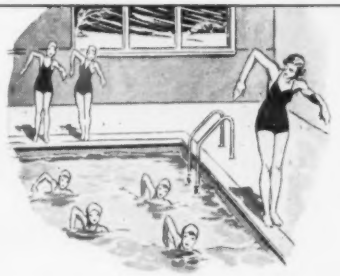
• The Scientific Apparatus Makers Association, 20 N. Wacker Dr., Chicago 6, has prepared a film directory listing all **free movie and strip films** available through SAMA members. The first edition of the new directory lists 14 motion pictures on subjects ranging from optical instruments to basic electronics, with data on each.

For more details circle #749 on mailing card

(Continued on page 224)

KOHLER
ELECTRIC PLANTS

Would a power failure leave you powerless?



Sudden darkness in a swimming pool may cause panic and disaster—when central station power is cut off by a storm or accident. Kohler stand-by plants *automatically* take over critical loads. Provide lighting for pools, gyms, auditoriums, corridors, exits as long as needed—also maintain heating and ventilating systems. Install *before* the emergency. Sizes, 1000 watts to 35 KW, gasoline and Diesel. Write for folder S-1.



Model 35R81, *35 KW, 120 208 volt A.C. Remote starting.*

KOHLER CO., KOHLER, WISCONSIN • EST. 1873

KOHLER OF KOHLER
PLUMBING FIXTURES • HEATING EQUIPMENT
ELECTRIC PLANTS • AIR-COOLED ENGINES
PRECISION CONTROLS



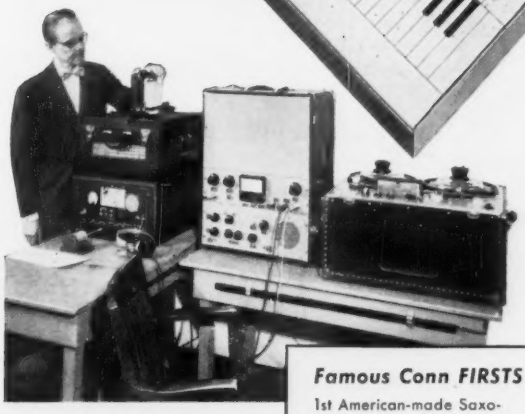
PORTRAIT OF TWO CORNET TONES. Which one is good, which one is poor? Both tones are the F below Middle C, started softly and played crescendo over a period of three seconds. Both are analyzed through the 23rd partial. Both have a fundamental and 22 harmonics. But that is about as far as the resemblance goes, for the one on the left is a poor, drab sort of tone, while the one of the right is rich and vibrant!

Research "Captures Tone" for Study

WHAT IS A GOOD TONE? What is a poor tone? What makes the difference? For a long time physicists have known that tone quality was a matter of harmonics. But harmonic analysis of a tone has until recently been a long and laborious task, and knowledge of tone quality has progressed at a snail's pace. Today, Conn is able to make rapid analyses of the harmonic structure of any tone.

From a great wealth of data developed during the past several years, Conn has gone a long way in answering the questions about tone and how to build better tone quality into wind instruments. For superior tone quality, always choose a genuine Conn instrument . . . and be SURE!

BAND INSTRUMENT DIVISION
C. G. Conn Ltd., Department 399, Elkhart, Indiana



THE MAN AND THE MACHINE. Above, Dr. Earle L. Kent, director of research at Conn, stands beside the harmonic analyzer used in breaking tone down into its physical elements. On the white cylinder is a permanent, visual record of the components of a tone, one of many thousands in the Conn research laboratory.

CONN HAS THE ONLY FULL-TIME RESEARCH LABORATORY IN THE INDUSTRY

Famous Conn FIRSTS!

1st American-made Saxophone
1st American-made metal clarinet
1st double-bell euphonium
1st Sousaphone
1st short-action valves
1st and only seamless Coprion bell
1st American-made bassoon
1st all-electronic organ
1st and only Electro-D bell
1st and only Micro-finish
1st and only acoustically-correct mouthpipes
1st and only Coli-bore instruments
1st Electronic Tuning Device (Stroboconn)

YOU CAN RECOMMEND...

CONN BAND INSTRUMENTS

...WITH CONFIDENCE

"WORLD'S LARGEST MANUFACTURER OF BAND INSTRUMENTS"

What's New ...

• The story of the **"Klenzade Complete Sanitation Programs for Institutions"** is told in a four page folder released by Klenzade Products., Inc., Beloit, Wis. Subjects covered include mechanical and hand dishwashing of glasses, bottles, dishes and pots and pans, as well as large kitchen equipment; washing and sanitation of food utensils, kitchen equipment, locker rooms and toilets, floors, walls, ceilings, woodwork, windows, glass bricks and lights; water supply; swimming pool chlorination; insect control, and laundry.

For more details circle #750 on mailing card

• A new 16 page catalog gives detailed information on the full line of **Bestwall Gypsum Wallboard Products** manufactured by Certain-teed Products Corp., 120 E. Lancaster Ave., Ardmore, Pa. Photographs and line drawings supplement product descriptions and uses of plain, wood-grain and insulating gypsum wallboard, gypsum sheathing, wallboard joint treatment, fire-rated gypsum wallboard and wallboard accessories.

For more details circle #751 on mailing card

• The Enoch Pratt Free Library, 400 Cathedral St., Baltimore 1, Md., has prepared a 32 page booklet on **"Where to Buy 2 by 2 Slides."** Copies of the booklet are offered at fifteen cents each.

For more details circle #752 on mailing card

• How to repair stair treads that are worn and dangerous is discussed in a folder released by Wooster Products Inc., 100 Spruce St., Wooster, Ohio. The leaflet, **"Making Stairs and Walkways Safe,"** shows the complete selection of Wooster extruded and cast metal safety stair treads for stairway repair.

For more details circle #753 on mailing card

• A new folder, **Form No. M-955, on Dor-O-Matic Manual Door Controls** is offered by the Dor-O-Matic Division of Republic Industries, Inc., 4446 N. Knox Ave., Chicago 30. A complete description of the 25 models of the new concealed-in-the-floor door control units that control as they open and as they close is given in the folder together with data on application of the various models.

For more details circle #754 on mailing card

• The newest teaching aid offered by the Department of Educational Affairs, Ford Motor Company, 3000 Schaefer Rd., Dearborn, Mich. is a complete educational kit containing an informative book, three filmstrips and a teacher's guide. The kit, **"A Car Is Born,"** answers the questions on "How are cars manufactured?" "What raw materials are required?" and "How are the products designed?" The illustrated book for pupil use contains three sections covering Research, Styling and Engineering; Manufacturing, and Assembly. Each of the sections is augmented by a filmstrip. The teacher's guide follows the outline of the book and includes synopsis, suggested activities, topics for discussion and key ideas. Illustrated, easily followed scripts for the filmstrips are also included. The kit is packaged in a box designed for storing with other Ford teaching aids.

For more details circle #755 on mailing card

• **"The Handling, Repair and Storage of 16 mm and 8 mm Films"** is the subject of a revised booklet available from Eastman Kodak Company, Sales Service Division, 343 State St., Rochester 4, N. Y. The 12 page booklet is punched to fit the Kodak Photographic Notebook. It is designed to be helpful to visual-education film users and film libaries and covers possible causes of damage with suggestions for correction, inspection and repair, and storage.

For more details circle #756 on mailing card

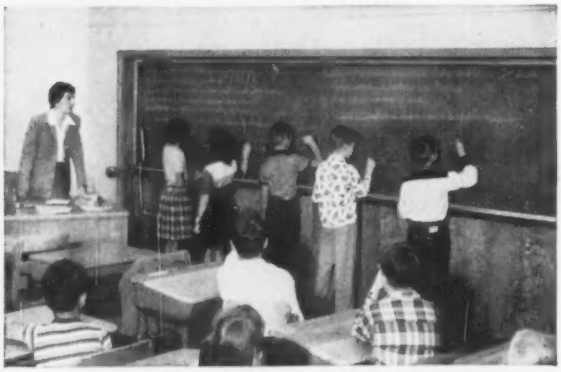
• Design and construction features of **"EZ-A-Way" mechanical folding bleachers** are given in a new folder released by the Bleacher Division, Berlin Chapman Company, Berlin, Wis. Exclusive features are described in detail with capacities and dimensions as well as architects' specifications and construction diagrams.

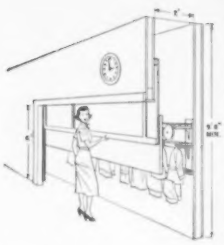
For more details circle #757 on mailing card

(Continued on page 226)

BARBER COLMAN

Barcol®
WARDROBEdoor



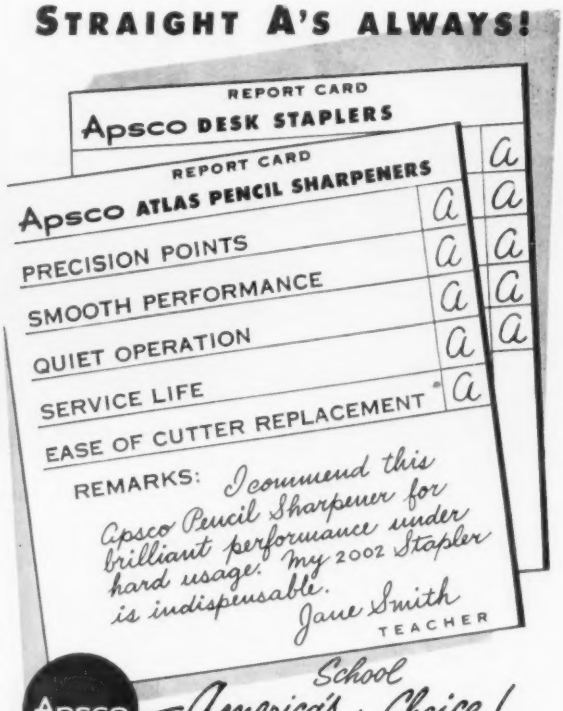


WARDROBE BEHIND CHALKBOARD is reached by easy upward movement of 2-section Barcol WARDROBEdoor. Full-view opening gives teacher control of "cloakroom rush." Provides more working wall space for chalkboard or tackboard, more usable floor space clear of pivots and hinges. Advertised to school officials. Call your Barcol distributor...under "Doors" in phone book.

Barber-Colman Company

DEPT. NB63, ROCKFORD, ILL.

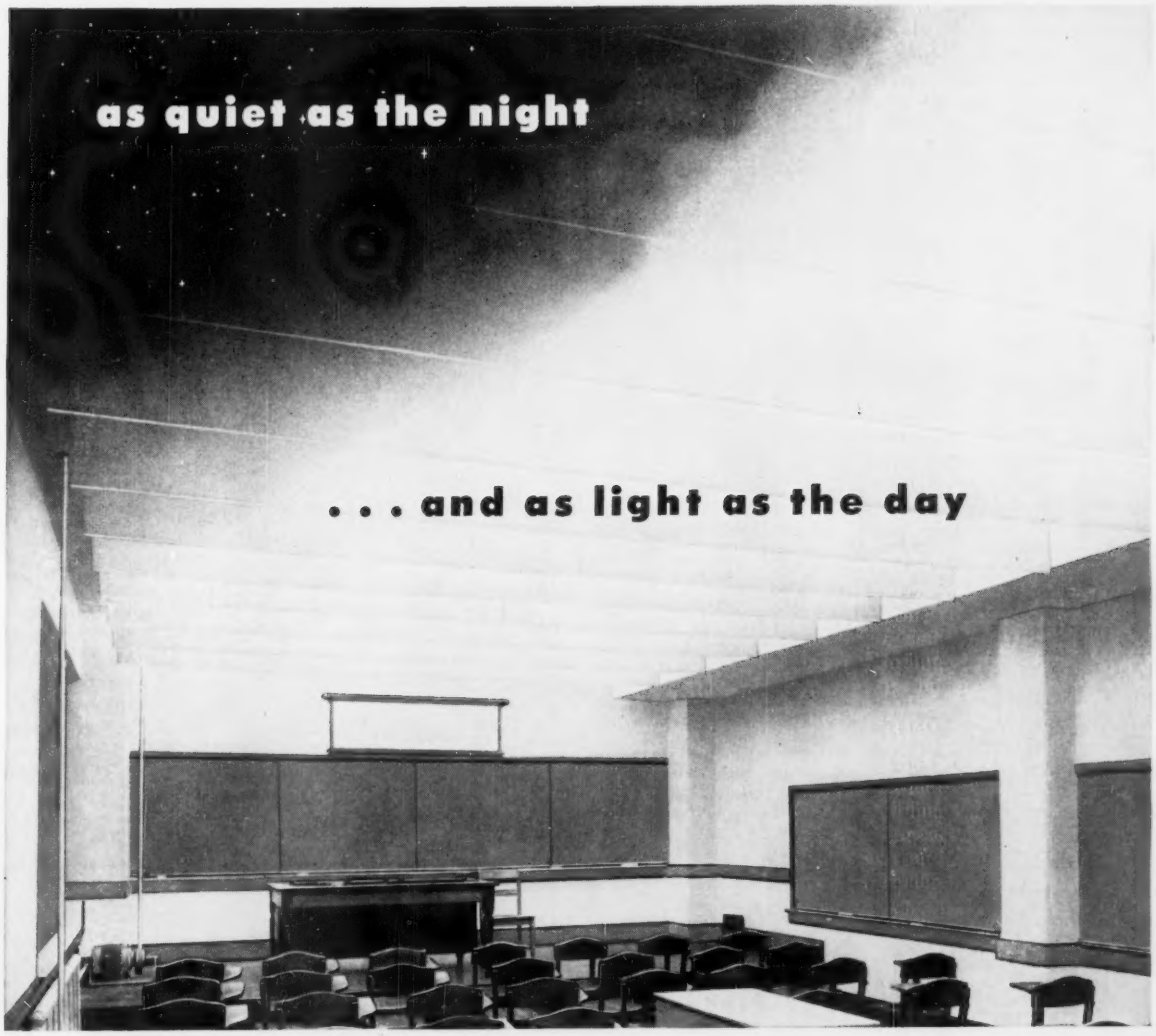
STRAIGHT A'S ALWAYS!



Apsco® School — America's Choice!

Apsco products inc.

9855 W. PICO BLVD., LOS ANGELES, CALIF.



CURTIS

LIGHT SOUND CONDITIONING

SYSTEM

PAT. APPLIED FOR

This new Light and Sound Conditioning System Gives the Most Modern Lighting Plus Efficient Acoustical Treatment At Low Installation and Maintenance Cost

The Curtis Light and Sound Conditioning System provides quality, low brightness illumination and eliminates excessive sound reflections. The Lighting System consists of basic, extension, and wing sections which may be combined to accommodate any size schoolroom, office, auditorium or other interior.

The Sound System consists of vertical panels of high quality acoustical material with a high reflectance, flame retarding, washable finish. The acoustical panels are positioned between 96-inch T-12 fluorescent lamps.

Here is a system that enables contractors to offer both fine lighting and sound conditioning at a low initial cost, low installation cost, low operating and low maintenance cost. Write for further details.

CURTIS LIGHTING, INC.
Dept. C23-LS 6135 W. 65th St.
Chicago 38, Illinois

CURTIS LIGHTING OF CANADA LTD.
195 Wickstead Ave.
Toronto 17, Ont., Canada

Name_____

Company_____

Address_____

City_____ State_____

CURTIS LIGHTING, INC. • Dept. C23-LS • 6135 West 65th Street, Chicago 38, Illinois

What's New ...

• The cost of drinking straws can be materially reduced by use of the **Duplex Straw Dispenser** for unwrapped straws, according to information presented in a leaflet available from the Duplex Straw Dispenser Co., 511 N. La Cienega Blvd., Los Angeles 48, Calif. How the dispenser operates, Duplex specifications and exclusive features, and how costs are cut radically with the use of the Duplex dispensers are subjects discussed in the new leaflet.

For more details circle #758 on mailing card

• **"Floor Cleaning Equipment by Geerpres"** is the subject of a 20 page catalog (No. 955) released by Geerpres Wringer, Inc., Muskegon, Mich. Included in the catalog is descriptive information on mop wringers, Jet Streem mop washer, handles for twin-chassis mopping outfits, buckets, mop sticks and the almost fifty different items of cleaning equipment manufactured by the company.

For more details circle #759 on mailing card

• **The 1956 Catalog of Phonograph Records for Classroom and Library, Kindergarten to Grade 9," is now available from** Educational Record Sales, 146 Reade St., New York 13. Records are listed according to subjects, areas and grades. Sections on music appreciation, rhythms, square dance, social studies, language arts and other subjects are included in the 36 page booklet.

For more details circle #760 on mailing card

Film Releases

"Audio-Visual Materials in Teaching," selection and use of audio-visual materials, 1¼ reels, 16 mm sound, color and black and white. "Life in a Coal-Mining Town," "Age of Discovery: English, French and Dutch Explorations," "Where Do Our Letters Go?," "A Boy of India: Rama and his Elephant" and "The Three Little Pigs: Background for Reading and Expression," all 1 reel, 16 mm sound, color and black and white. **Coronet Films, 65 E. South Water St., Chicago 1.**

For more details circle #761 on mailing card

"Stories for Young Ears—II," filmstrips for kindergarten and primary grades, including "Snow White and Red Rose," "The Magic Horse," "Bobby, The Squirrel," "Reynard, The Fox," "Puss In Boots" and "Sleeping Beauty." **DuKane Corporation, St. Charles, Ill.**

For more details circle #762 on mailing card

"Our Neighborhood Helpers," series of filmstrips in color for primary grades, including The Mailman, The Policeman, The Fireman, The Grocer, The Milkman and The Librarian. "Guidance Discussion Series," 7 filmstrips in color for junior high, demonstrating adolescent problems. **The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich.**

For more details circle #763 on mailing card

"India's Many Faces," current affairs filmstrip on India's role in world affairs, 59 frames, 35 mm, with discussion manual. **Office of Educational Activities, The New York Times, Times Square, New York 36.**

For more details circle #764 on mailing card

"Your Table Manners," 1 reel, 16 mm sound, social studies film for primary and middle grades. "What About Alcoholism," acquaints young people with nature and problem of alcoholism. "Word Study Series," "Grooming for Boys" and "American Scientists," filmstrip sets in color for elementary and secondary schools. **Young America Flims, Inc., 18 E. 41st St., New York 17.**

For more details circle #765 on mailing card

Geography filmstrip series in color, The Balkans, Southern and Southwestern Asia: "Living in Greece and Yugoslavia," "Living in Turkey," "Living in Southwestern Asia" and "Living in India and Pakistan;" Central and Southern Europe: "Living in Central Europe," "Living in West Germany," "Living in Italy" and "Living in Spain and Portugal;" Eastern and Southeastern Asia: "Living in China and Korea," "Living in Japan," "Living in Indonesia and the Philippines" and "Living in Southeastern Asia," produced by Rand McNally and **Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago 14.**

For more details circle #766 on mailing card

MAYLINE



STRETCH
Your Classroom
Furniture Budget

C-7702 ART TABLE

Have budget troubles? Can't obtain enough tables? Let Mayline show you how to buy basic equipment now and add completing units later, ease budget strain.

C-7703B is complete table. Units can be purchased separately. Buy basic table C-7703. Later add board storage unit C-7720; finish with drawer unit C-7721. Or, buy table C-7702. May we quote prices!

Symbol of MAYLINE *Superiority*



C-7703B DRAWING TABLE

MAYLINE COMPANY
631 N. Commerce St.,
Sheboygan, Wis.

MAYLINE MAYLINE MAYLINE

What

WILL THE WORLD AND ITS SCHOOL BE LIKE IN 2000 A.D.?

▼

See the April Issue of

THE NATION'S SCHOOLS

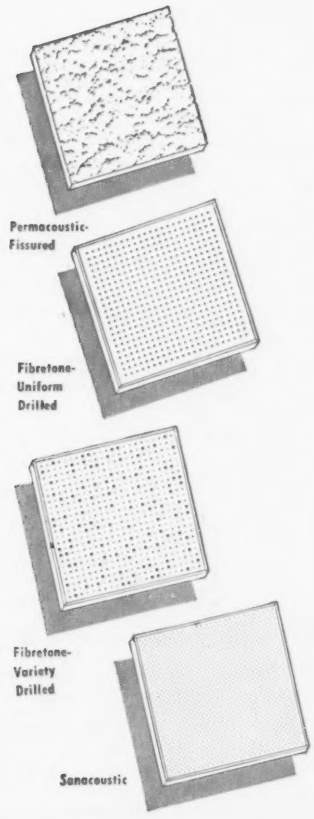
919 N. MICHIGAN AVE., CHICAGO 11, ILL.

Quiet is a modern necessity



Johns-Manville Fibretone ceilings in St. Mary's School, Nutley, N. J., effectively reduce the noise of active children at play... help make teaching easier. *Architect: Wm. Neumann and Sons, Jersey City, N. J.*

Changing noisy recreation to Quiet child's play!



Johns-Manville Acoustical Materials meet today's need for low-cost sound control

Schools and institutions of all types depend on modern materials to achieve maximum efficiency. That's why practically all new building and modernization specifications include acoustical ceilings to reduce disturbing noise.

Johns-Manville offers a complete choice of highly efficient sound absorbing materials for every acoustical need.

- **J-M Permacoustic® Units**—combine maximum acoustical efficiency with architectural beauty. Has attractive fissured surface. Made of mineral wool, Permacoustic meets all building code fire-safety requirements.
- **J-M Fibretone® Units**—provide high acoustical efficiency at modest cost. Hundreds of small holes, drilled in a Uniform or Variety pattern, act as "noise traps." Fibretone has a white paint finish. Available with flame-resistant finish.
- **J-M Sanacoustic® Units**—perforated metal panels backed with a fireproof, highly sound-absorbent element. Noncombustible and sanitary. The white baked-enamel finish is easy to keep clean, and may be repainted.
- **J-M Transite® Acoustical Panels**—perforated asbestos-cement facings backed with a mineral wool sound absorbing element. Suitable in areas with high humidity (dishwashing rooms, kitchens, swimming pools, etc.).

For a complete survey by a J-M Acoustical Engineer, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. NS, New York 16, N. Y. In Canada, write 565 Lakeshore Road East, Port Credit, Ontario.

JOHNS-MANVILLE JM PRODUCTS

See "MEET THE PRESS" on NBC-TV, sponsored alternate Sundays by Johns-Manville

Johns-Manville

45 years of leadership in the manufacture of acoustical materials





Get direct, quiet, private communications with your own system

You save money, you get exactly what you need, when you buy a Kellogg specialized interior communications system. For instance, you can have a simple push-button system or one that will provide unlimited simultaneous service to any spot in your school. If needed, a system can be installed that will enable you to set up faculty telephone conferences in seconds.

Several standard systems are available. One of these will fit your needs. See your dealer or send coupon for your Select-O-Kit today.

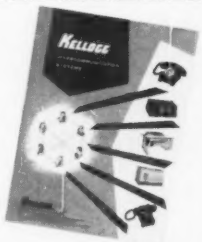
KELLOGG
A DIVISION OF IT&T

Kellogg Switchboard and Supply Co.
A Division of International Telephone and Telegraph Corp.
Quality Communications Systems
—o—
Quality Components for Industrial Control

Dealers in principal cities of United States and Canada

Kellogg Switchboard and Supply Co.,
Commercial Products Dept. 74-C,
79 W. Monroe Street, Chicago 3, Illinois
Gentlemen: Please send Select-O-Kit telling about Kellogg specialized interior communications systems.

NAME_____
SCHOOL_____
ADDRESS_____
CITY_____ ZONE____ STATE_____



What's New ...

• **Oxychloride Flooring,** what it is, why it is used, and where it is used in schools, hospitals and other public buildings, is covered in a new brochure released by Oxychloride Cement Association, Inc., 1832 M St., N.W., Washington 6, D. C.
For more details circle #767 on mailing card

• A special catalog in color has been issued by United States Bronze Sign Co., Inc., 570 Broadway, New York 12, on **Testimonial and Award Plaques.** The booklet not only gives information on the company's service in designing and making bronze plaques, but contains historical reference to the use of bronze throughout the centuries and tells a picture and word story of the plant in action, from artist's drawing board to the finished product.
For more details circle #768 on mailing card

• The complete line of **"Chemical Porcelain Laboratory Sinks"** manufactured by The U.S. Stoneware Co., 60 E. 42nd St., New York 17, is described and illustrated in **Bulletin L-8.** The 20 page bulletin is printed in three colors and gives data on how these sinks are made, including dimensional drawings and charts for sinks, outlets, drains and traps.
For more details circle #769 on mailing card

• A 132 page **Catalog and Wiring Guide No. 20** is available from The Wiremold Co., Hartford 10, Conn. The full line of Raceways and Fittings for wiring is included in the booklet. Products are pictured and described and the catalog is indexed.
For more details circle #770 on mailing card

• **Bulletin No. 136** on the **Barnstead Bottle Pump** describes how the unit pumps distilled water from tank or carboy while permitting only purified air to enter. Use of the special Ventgard filter removes and absorbs various impurities from the incoming air. The bulletin is available from Barnstead Still & Sterilizer Co., 219 Lanesville Terrace, Forest Hills, Boston 31, Mass.
For more details circle #771 on mailing card

• **"The Logic of Stoker Heating"** is the title of a 12 page brochure available from The Will-Burt Company, Orrville, Ohio. Special attention, including a study of 18 schools, is given to the problems of heating schools and other public buildings. The brochure discusses in simple and practical language the reasons for considering safe, dependable and economical stoker-fed coal heat. The text is illustrated with photographs of schools using Will-Burt Stokers.
For more details circle #772 on mailing card

• Steel shelving, lockers and other storage and maintenance equipment for institutional use are described and illustrated in a new **Industrial Equipment Catalog** by Precision Equipment Co., 3700 N. Milwaukee Ave., Chicago 41.
For more details circle #773 on mailing card

PROD

Ind

Key

696 Classmate School Furniture
American Seating Co.

697 Pneumatic Round Thermostat
Minneapolis-Honeywell Regulat Co.

698 1956 Line of Products
Armstrong Cork Co.

699 Steel Cabinets
Geneva Modern Kitchens

700 Plastic Hardtop for Cabinets
John J. Nesbitt, Inc.

701 Control Consoles
Radio Corporation of America

702 1956 Ambassador Bus
Oneida Products

703 Tri-Simplex Micro-Projector
Bausch & Lomb Optical Co.

704 Portable Tablet Arms
Universal Bleacher Co.

705 Wall Projection Screen
Radiant Mfg. Corp.

706 SlateSteel Chalkboard
Beckley-Cardy Co.

707 Monotop Counter-Surfacing
General Electric Co.

708 SynchroRobe
R. G. Ross and Co., Inc.

709 Fluorescent Light Guards
E. H. Titchener & Co.

710 Roto-Kard
Remington Rand Inc.

711 Fluorescent Luminaires
Westinghouse Electric Corp.

712 Phonograph Pickup Arm
Calitone Corp.

713 World Literacy Map
Denoyer-Geppert Co.

714 Stitch Discs
Singer Sewing Machine Co., In

715 Radioactivity Demonstrator
Central Scientific Co.

716 Series "C" Calculators
Burroughs Corp.

717 "PhD" Projector
Automatic Projection Corp.

718 Mobile Drying Rack
Crescent Metal Products, Inc.

719 Acoustical Ceiling Panel
Tectum Div.

720 Route-Jig
Porter-Cable Machine Co.

721 Adjustable Typewriter Stand
Hardware Engineering Co., Inc.

Index

Key

774 Acme Visible Records, Inc.
Record Systems .....

775 Acorn Wire & Iron Works
Folding Gates .....

776 Aetna Casualty and Surety Company
Driver Teaching Aid .....

777 Allied Radio Corporation
Electronic Builders' Kits .....

778 American Air Filter Co., Inc.
Unit Ventilator Products 132

779 American Automobile Association
Driver Teaching Aids .....

780 American Bitumuls & Asphalt Compa
Playground Surfacing Material ...

781 American Desk Mfg. Company
Classroom Furniture .....

782 American-Olean Tile Company
Floor Covering .....following pa

783 American Optical Company
Teaching Aids .....

USE THESE CARDS

(We pay the postage)

These cards are detachable and are provided for the convenience of our subscribers, and those to whom they pass their copies, in obtaining information on products and services advertised in this issue or described in the "What's New" Section. See reverse side.

March, 1956

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

WHAT'S NEW

696	697	698	699	700	701
702	703	704	705	706	707
708	709	710	711	712	713
714	715	716	717	718	719
720	721	722	723	724	725
726	727	728	729	730	731
732	733	734	735	736	737
738	739	740	741	742	743
744	745	746	747	748	749
750	751	752	753	754	755
756	757	758	759	760	761
762	763	764	765	766	767
768	769	770	771	772	773

ADVERTISEMENTS

774	775	776	777	778	779	780	781	782	783	784	785	786	787	
788	789	790	791	792	793	794	795	796	797	798	799	800	801	
802	803	804	805	806	807	808	809	810	811	812	813	814	815	
816	817	818	819	820	821	822	823	824	825	826	827	828	829	
830	831	832	833	834	835	836	837	838	839	840	841	842	843	
844	845	846	847	848	849	850	851	852	853	854	855	856	857	
858	859	860	861	862	863	864	865	866	867	868	869	870	871	
872	873	874	875	876	877	878	879	880	881	882	883	884	885	
886	887	888	889	890	891	892	893	894	895	896	897	898	899	
900	901	902	903	904	905	906	907	908	909	910	911	912	913	
914	915	916	917	918	919	920	921	922	923	924	925	926	927	
928	929	930	931	932	933	934	935	936	937	938	939	940	941	
942	943	944	945	946	947	948	949	950	951	952	953			

NAME _____ TITLE _____

INSTITUTION _____

ADDRESS _____ CITY _____ ZONE _____ STATE _____

March, 1956

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

WHAT'S NEW

696	697	698	699	700	701
702	703	704	705	706	707
708	709	710	711	712	713
714	715	716	717	718	719
720	721	722	723	724	725
726	727	728	729	730	731
732	733	734	735	736	737
738	739	740	741	742	743
744	745	746	747	748	749
750	751	752	753	754	755
756	757	758	759	760	761
762	763	764	765	766	767
768	769	770	771	772	773

ADVERTISEMENTS

774	775	776	777	778	779	780	781	782	783	784	785	786	787	
788	789	790	791	792	793	794	795	796	797	798	799	800	801	
802	803	804	805	806	807	808	809	810	811	812	813	814	815	
816	817	818	819	820	821	822	823	824	825	826	827	828	829	
830	831	832	833	834	835	836	837	838	839	840	841	842	843	
844	845	846	847	848	849	850	851	852	853	854	855	856	857	
858	859	860	861	862	863	864	865	866	867	868	869	870	871	
872	873	874	875	876	877	878	879	880	881	882	883	884	885	
886	887	888	889	890	891	892	893	894	895	896	897	898	899	
900	901	902	903	904	905	906	907	908	909	910	911	912	913	
914	915	916	917	918	919	920	921	922	923	924	925	926	927	
928	929	930	931	932	933	934	935	936	937	938	939	940	941	
942	943	944	945	946	947	948	949	950	951	952	953			

NAME _____ TITLE _____

INSTITUTION _____

ADDRESS _____ CITY _____ ZONE _____ STATE _____

PRODUCT INFORMATION

Index to "What's New"

Pages 185-228

Key

696 Classmate School Furniture
American Seating Co.

697 Pneumatic Round Thermostat
Minneapolis-Honeywell Regulator Co.

698 1956 Line of Products
Armstrong Cork Co.

699 Steel Cabinets
Geneva Modern Kitchens

700 Plastic Hardtop for Cabinets
John J. Nesbitt, Inc.

701 Control Consoles
Radio Corporation of America

702 1956 Ambassador Bus
Onaklin Products

703 Tri-Simplex Micro-Projector
Bausch & Lomb Optical Co.

704 Portable Tablet Arms
Universal Bleacher Co.

705 Wall Projection Screen
Radiant Mfg. Corp.

706 SlateSteel Chalkboard
Beckley-Cardy Co.

707 Monotop Counter-Surfacing
General Electric Co.

708 Synchrolabe
R. G. Ross and Co., Inc.

709 Fluorescent Light Guards
E. H. Titchener & Co.

710 Roto-Kard
Remington Rand Inc.

711 Fluorescent Luminaires
Westinghouse Electric Corp.

712 Phonograph Pickup Arm
Califone Corp.

713 World Literary Map
Denoyer-Geppert Co.

714 Stitch Discs
Singer Sewing Machine Co., Inc.

715 Radioactivity Demonstrator
Central Scientific Co.

716 Series "C" Calculators
Burroughs Corp.

717 "PhD" Projector
Automatic Projection Corp.

718 Mobile Drying Rack
Crescent Metal Products, Inc.

719 Acoustical Ceiling Panel
Tectum Div.

720 Route-Jig
Porter-Cable Machine Co.

721 Adjustable Typewriter Stand
Hardware Engineering Co., Inc.

Key

722 Dinnerware with Patterns
International Molded Plastics, Inc.

723 Shower Control Unit
Leonard Valve Co.

724 Floor Machines
General Floorcraft, Inc.

725 Plastic Glazing Material
Structoglas Div.

726 Dual-Control for Cooler
Sunroc Corp.

727 Integrated TV System
Dage Television Div.

728 Surf-a-Lite Fixture
Electro Silv-A-King Corp.

729 Hot Chocolate Unit
Mills Industries, Inc.

730 Vitreous Ware Cleanser
J. I. Holcomb Mfg. Co.

731 Bluegrass Quarry Tile
The Mosaic Tile Co.

732 Electronics Kit
Crow Electri-Craft Corp.

733 Auxiliary Tank Kit
Premier Company

734 Classroom Radio
Fairchild Controls Corp.

735 Improved Ditto D-10
Ditto, Inc.

736 Relief Map of Canada
Aero Service Corp.

737 New Colors for Dinnerware
Corning Glass Works

738 Whip Cake Topping
S. Gumpert Co., Inc.

739 Four New Burners
Iron Fireman Mfg. Co.

740 "Kold" Shade Lamp
General Lamps Mfg. Corp.

741 Heavy Duty Wall Covering
Columbus Coated Fabrics Corp.

742 Nesting Cots
The Pacific Shaw Co.

743 Safety Step Plate
Samuel Moore & Co.

744 Milk Can Cart
Meterflo Dispensers

745 Porcenell Fact Book
Benjamin Electric Mfg. Co.

746 Bulletin
American Air Filter Co., Inc.

747 Catalog
White Sewing Maching Corp.

748 Bulletin Board Edition No. 2
National Sanitary Supply Assn.

Key

749 Directory of Free Films
Scientific Apparatus M Assn.

750 "Sanitation Programs"
Klensade Products, Inc.

751 Catalog
Certain-teed Products Co

752 "Where to Buy 2 x 2 Slides"
Enoch Pratt Free Librar

753 "Making Stairs Safe"
Wooster Products Inc.

754 Form on Door Controls
Dor-O-Matic Div.

755 "A Car Is Born"
Ford Motor Co.

756 "Handling of Films"
Eastman Kodak Co.

757 Folder on Bleachers
Berlin Chapman Co.

758 Leaflet on Straw Dispenser
Duplex Straw Dispenser

759 Catalog No. 955
Geerpres Wringer, Inc.

760 Catalog of Records
Educational Record Sale

761 Film Releases
Coronet Films

762 "Stories for Young Ears—II"
DuKane Corp.

763 "Our Neighborhood Helpers"
The Jam Handy Organiz

764 "India's Many Faces"
The New York Times

765 Film Releases
Young America Films, In

766 Geography Filmstrip Series
Society for Visual Educat Inc.

767 Brochure on Flooring
Oxychloride Cement Ass

768 Catalog of Bronze Signs
U.S. Bronze Sign Co.

769 Bulletin L-8
The U.S. Stoneware Co.

770 Catalog and Wiring Guide
Wiremold Co.

771 Bulletin No. 136
Barnstead Still & Sterilize

772 "Logic of Stoker Heating"
The Will-Burt Co.

773 Industrial Equipment Catalog
Precision Equipment Co.

Index to Products Advertised

Key — Page

774 Acme Visible Records, Inc.
Record Systems 187

775 Acorn Wire & Iron Works
Folding Gates 142

776 Aetna Casualty and Surety Company
Driver Teaching Aid 221

777 Allied Radio Corporation
Electronic Builders' Kits 182

778 American Air Filter Co., Inc.
Unit Ventilator Products 132, 133

779 American Automobile Association
Driver Teaching Aids 154

780 American Bitumuls & Asphalt Company
Playground Surfacing Material 176

781 American Desk Mfg. Company
Classroom Furniture 145

782 American-Olean Tile Company
Floor Covering ..... following page 32

783 American Optical Company
Teaching Aids 196

Key — Page

784 American Seating Company
Classroom Furniture
..... following page 16

785 American Steel & Wire Division
Structural Steel 146, 147

786 Americana Corporation
Encyclopedias 207

787 Apsco Products Inc.
Pencil Sharpeners 224

788 Armstrong Cork Company
Acoustical Material 173

789 Barber-Colman Company
Temperature Control 33

790 Barber-Colman Company
Wardrobes 224

791 Bayley Company, William
School Windows 153

792 Bay West Paper Company
Paper Towel Dispenser 138

793 Beckley-Cardy Company
Chalkboard 97

794 Bell & Howell Company
Projector 28

Key

795 Bendix-Westinghouse Automot
Air Brake Co.
Air Brakes .....

796 Benjamin Electric Mfg. Comp
Chalkboards .....

797 Besseler Company, Charles
Projector .....

798 Breuer Electric Mfg. Company
Floor Maintenance .....

799 Brunswick-Balke-Collender Co
Classroom Equipment .....

800 Burgess-Manning Company
Radiant-Acoustical Ceilin

801 Burke Company, J. E.
Playground Equipment ..

802 Burroughs Corporation
Cash Register .....

803 Butler Mfg. Company
Metal Buildings .....

804 Califone Corporation
Teaching Aid .....

INDEX TO "WHAT'S NEW" ON FOLLOWING PAGE →

USE THESE CARDS

(We pay the postage)

These cards are detachable and are provided for the convenience of our subscribers, and those to whom they pass their copies, in obtaining information on products and services advertised in this issue or described in the "What's New" Section. See reverse side.

FIRST CLASS
PERMIT NO. 136
SEC. 34.9 P. L. & R.
CHICAGO, ILL.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

3 CENT POSTAGE WILL BE PAID BY

THE NATION'S SCHOOLS
919 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

FIRST CLASS
PERMIT NO. 136
SEC. 34.9 P. L. & R.
CHICAGO, ILL.

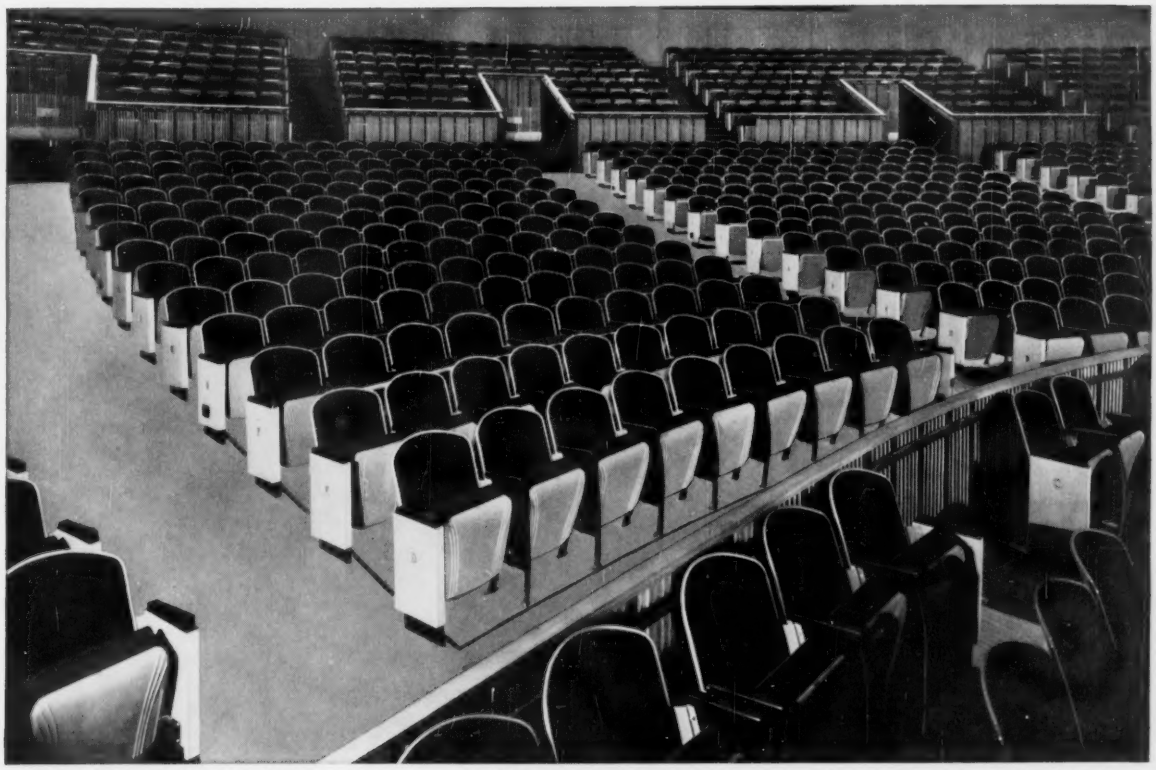
BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

3 CENT POSTAGE WILL BE PAID BY

THE NATION'S SCHOOLS
919 NORTH MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

Index to Products Advertised—*Continued*

Key		Page
805	Cambridge Tile Mfg. Company *School Planning Booklet*	135
806	Ceco Steel Products Corporation *Aluminum Windows*	14, 15
807	Celotex Corporation *Acoustical Ceiling*	199
808	Chesapeake and Ohio Railway Co. *Bituminous Coal*	159
809	Church Mfg. Company, C. F. *Toilet Seats*	124
810	Churchill Mfg. Company *Floor Maintenance*	206
811	Colson Corporation *Casters*	169
785	Columbia-Geneva Steel Division *Structural Steel*	146, 147
812	Conn Ltd., C. G. *Band Instruments*	223
813	Continental Steel Corporation *Wire Fence*	149
814	Coppes, Inc. *School Furniture*	18
815	Crane Company *Plumbing Fixtures*	150, 151
816	Cretors & Company, C. *Popcorn Machine*	210
817	Curtis Lighting, Inc. *School Lighting*	225
818	Cyclone Fence Dept., American Steel & Wire Div. of U.S. Steel *Wire Fence*	155
819	Daintee Toys, Inc. *Counting Frame*	180
820	Day-Brite Lighting, Inc. *School Lighting*	facing page 33
821	Delkote, Inc. *Surfacing Material for Books*	104
822	Denoyer-Geppert Company *Teaching Aid*	212
823	Desks of America, Inc. *Classroom Furniture*	154
824	Detroit Steel Products Company *Acoustical Building Panels*	129
825	Detroit Steel Products Company *School Doors*	162, 163
826	Duttra Flag Company, Inc. *Flags*	220
827	Devoe & Raynolds Co., Inc. *Paints*	127
828	Dick Company, A. B. *Duplicating Machine*	131
829	Ditto, Inc. *Duplicating Machine*	203
830	Dolge Company, C. B. *Floor Maintenance*	194
831	Dor-O-Matic Division *Door Controls*	16
832	Dudley Lock Corporation *Locks*	188
833	Dunham Company, C. A. *Heating & Cooling Equipment*	28, 29
834	Du Pont de Nemours & Co., Inc., E. I. *Floor Maintenance*	35
835	Du Pont de Nemours & Co., Inc., E. I. *Floor Maintenance*	137
836	Economics Laboratory, Inc. *Dishwashing Products*	121
837	Educators Manufacturing Co. *Classroom Cabinets*	25
838	Edwards Company, Inc. *Clock and Program System*	175
839	Equipment Mfg. Co., Inc. *Classroom Wardrobes*	140
840	Fiberesin Plastics Company *Plastic Tops*	Cover 4
841	Finnell System, Inc. *Floor Maintenance*	111
842	Ford Motor Company *School Bus Chassis*	141
843	Formica Company *Surfacing Material*	40
844	Garden City Plating & Mfg. Company *School Lighting*	192
845	General Floorcraft, Inc. *Floor Maintenance*	204
846	General Precision Laboratory Inc. *Teaching Aid*	195
847	Gold Seal Division, Congoleum-Nairn, Inc. *Floors and Walls*	219
848	Griggs Equipment Company *Classroom Furniture*	202
849	Gumpert Company, Inc., S. *Institutional Food*	Cover 2
850	Guth Company, Edwin, F. *School Lighting*	23
851	Halverson Speciality Sales *Display Rack*	206
852	Hampden Speciality Products, Inc. *School Seating*	194
853	Haws Drinking Faucet Company *Drinking Fountains*	144
854	Heins Company, H. J. *Institutional Food*	107
855	Herrick Refrigerator Company *Refrigerators*	32
856	Heyer Corporation *Duplicating Machine*	118
857	Heywood-Wakefield Company *School Furniture*	Cover 3
858	Hild Floor Machine Company *Floor Maintenance*	169
859	Hillyard Chemical Company *Floor Maintenance*	115
860	Hobart Mfg. Company *Food Machines*	103
861	Holcomb & Hoke Mfg. Company, Inc. *Folding Doors*	165
862	Holcomb Mfg. Company, J. I. *Floor Maintenance*	181
863	Holden Patent Book Cover Company *Book Covers*	98
864	Hunt Pen Company, C. Howard *Pencil Sharpeners*	222
865	Huntington Laboratories, Inc. *Conditioner for Athlete's Foot*	149
866	Ideal Dispenser Company *Milk Vender*	113
867	Illuminating Engineering Company *School Lighting*	214
868	International Harvester Company *School Bus Chassis*	34
869	Jennison-Wright Corporation *School Flooring*	5
870	Johns-Manville *Acoustical Material*	227
871	Johnson Service Company *Temperature Control*	facing page 1
872	Kellogg Switchboard & Supply Corp. *Intercommunication System*	228
873	Kewanee Boiler Division *Boiler*	183
874	Kewanee Industrial Washer Corp. *Dishwasher*	154
875	Keyes Fibre Company *Plastic Tableware*	following page 144
876	Keystone View Company *Teaching Aid*	facing page 145
877	Klenzade Products, Inc. *Deep Fry Cleaner*	220
878	Kohler Company *Emergency Power Unit*	222
879	Kuehne Manufacturing Company *Classroom Furniture*	30
880	Libbey-Owens-Ford Glass Company *Window Glass*	156, 157
881	Logan Engineering Company *Machine Shop Equipment*	174
882	Ludman Corporation *Control Bar Windows*	191
883	Magnecord, Inc. *Tape Recorder*	200
884	Mahon Company, R. C. *Insulated Metal Walls*	9
885	Majestic Wax Company *Floor Maintenance*	184
886	Manley, Inc. *Popcorn Machine*	105
887	Mayline Company *Classroom Furniture*	226
888	Medart Products Co., Inc., Fred *Gymnasium Seating*	119
889	Midwest Folding Products *Chair & Table Caddies*	182
890	Minneapolis-Honeywell Regulator Co. *Temperature Control*	2, 3
891	Mississippi Glass Company *Diffusing Glass*	24
892	Mitchell Mfg. Company *Multi-Purpose Furniture*	172
893	Monroe Company *Folding Banquet Tables*	200
894	Montgomery Mfg. Company *Program Clocks*	182
895	Moore Company, E. R. *Choral Robes*	167
896	Multi-Clean Products, Inc. *Floor Maintenance*	217
897	National Dryer Sales Corporation *Hand Dryer*	194
898	National Electrical Manufacturers Assn. *Electric Range*	93
899	National Electrical Manufacturers Assn. *Food Freezer Teaching Kit*	9
900	National Lock Company *Locks*	178
901	National School Furniture Company *Multi-Purpose Classroom Cabinets*	161
785	National Tube Division *Structural Steel*	146, 147
902	Neubauer Mfg. Company *Basket Rack*	180
903	Nissen Trampoline Company *Trampolines*	143
904	Norton Door Closer Company *Door Closers*	215
905	Nystrom & Company, A. J. *Display Rail*	201
906	Oneida Products Division *School Bus Body*	123
907	Owens Illinois: Kimble Glass Company Subsidiary *Glass Block*	170, 171
908	Page Fence Association *Wire Fence*	120
909	Pentron Corporation *Tape Recorder*	208
910	Petersen & Company *Gym Mats*	200
911	Pittsburgh Plate Glass Company *Window Glass*	36, 37
912	Pittsburgh Plate Glass Company *Paints*	following page 32
913	Playtime Equipment Corporation *Athletic Field Seating*	116
914	Potter Fire Escape Company *Fire Escapes*	210
915	Powers Regulator Company *Temperature Control*	31
916	Radio Corporation of America *Sound Systems & Projectors*	20, 21
917	Rauland-Borg Corporation *Intercommunication System*	178
918	Republic Steel Corporation *Steel Windows*	156, 157
919	Richards-Wilcox Mfg. Company *Wardrobes*	126
920	Rixson Company, Oscar C. *Door Closers*	198
921	Robbins Flooring Company *School Flooring*	122
922	Rowles Company, E. W. A. *Chalkboard Erasers & Eraser Cleaner*	158
923	Royal Typewriter Company *Electric Typewriters*	205
924	St. Charles Mfg. Company *Homemaking Classroom Equipment*	22
925	Satway Steel Products, Inc. *Bleachers*	following page 16
926	Schieber Sales Company *Folding Tables & Benches*	13
927	Sexton & Company, John *Institutional Food*	101
928	Sheldon Machine Co., Inc. *Machine Shop Equipment*	152
929	Simpson Logging Company *Acoustical Tile*	99
930	Singer Sewing Machine Company *Sewing & Cutting Table*	211
931	Sjostrom Company, John E. *Library Furniture*	108
932	Sloan Valve Company *Flush Valves*	facing Cover 2
933	Smithcraft Lighting Division *School Lighting*	177
934	Southern Equipment Company *Food Serving Equipment*	109
935	Spencer Industries *Dedication Tablets*	182
936	Straus-Duparquet, Inc., Nathan *School Equipment & Supplies*	180
937	Straubel Paper Company *Towels & Tissue*	180
938	Superior Coach Corporation *School Bus*	27
785	Tennessee Coal & Iron Division *Structural Steel*	146, 147
939	Toledo Scale Company *Kitchen Machines*	130
940	U.S. Plywood Corporation *Chalkboard*	180
785	United States Steel Corporation *Structural Steel*	146, 147
785	U.S. Steel Supply Division *Structural Steel*	146, 147
941	Universal Bleacher Company *Gymnasium Seating*	213
942	Universal Industries Inc. *Food Mixer*	216
943	Uvalde Rock Asphalt Company *Floor Covering*	197
944	Victor Animatograph Corporation *Projector*	125
945	Vogel-Peterson Company *Coat and Hat Racks*	114
946	Wakefield Company *School Lighting*	179
947	Wayne Works *School Bus Body*	19
948	Weber Costello Company *Chalkboards*	208
949	West Disinfecting Company *Floor Maintenance*	164
950	Westinghouse Electric Corporation *School Lighting*	138, 139
951	Wilcox-Gay Corporation *Classroom Furniture*	8
952	Williams & Brower, Inc. *School Furniture*	206
953	Wyandotte Chemicals Corporation *Maintenance Products*	209

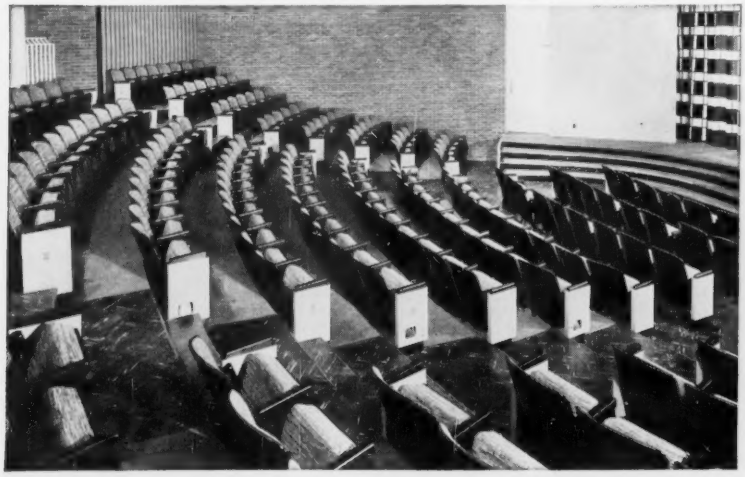


THE KRESGE AUDITORIUM *contains 1,238 special TC 616 chairs. Metal parts are painted in alternating rows of soft rainbow hues.*

Heywood Produces to Unique Specifications for the New Auditorium and Theatre at M. I. T.

Spotlighting the flexibility of Heywood production is the special adaptation of the TC 616 theatre chairs manufactured to design specifications of the architect for the Kresge Auditorium and Little Theatre of the Massachusetts Institute of Technology. The special end standards are a combination of metal and limed oak. Special upholstery fabrics include black mohair in the Auditorium and Kerry linen in the Little Theatre. Cushions are "Contour" formed rubber, self-rising. A special painting of metal parts was required to complete the decorative effect. Installation of this Heywood seating was supervised by Oglesby Equipment Company, Heywood-Wakefield distributors in Detroit.

THE LITTLE THEATRE *contains 214 special TC 616 chairs. Upholstery is a black, white and brown tweed; metal parts are painted black.*



A complete description of Heywood auditorium seating is contained in the Heywood-Wakefield School Furniture Catalog. For your free copy write: Heywood-Wakefield Company, School Furniture Division, Menominee, Michigan or Gardner, Massachusetts.

HEYWOOD-WAKEFIELD

EST. 1826

of course..  *it's* FIBERESIN!

THE FIRST AND ORIGINAL SOLID PLASTIC TOP

SANITARY EDGES

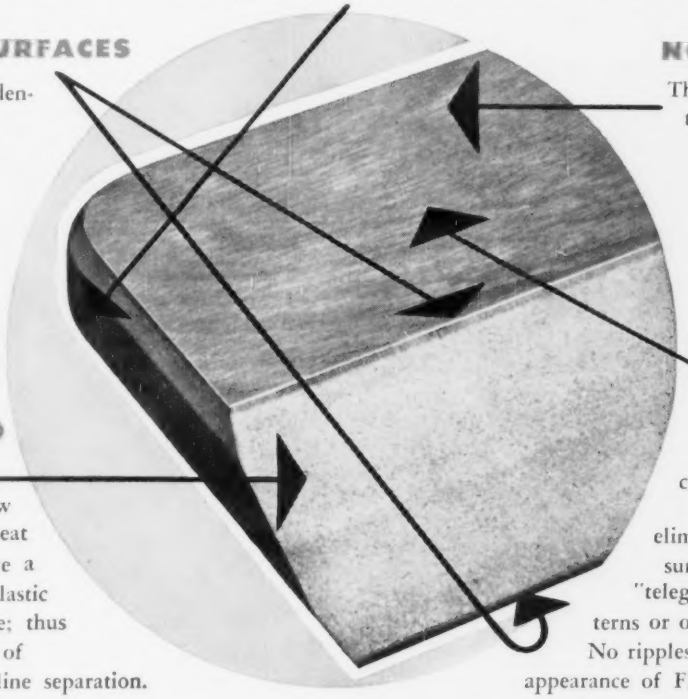
The edges of FIBERESIN board may be treated by any method acceptable to end grain hardwood. They may be sawed, shaped, grooved, routed, sanded, stained, lacquered, painted or varnished. Because of the hard dense core material used, they will withstand severe impact shocks, and when accidentally damaged by conditions of extreme abuse may be refinished on the desk. It is not necessary to remove a unit from service and return it to the manufacturer. Elimination of edge concealment by banding also eliminates a sanitary hazard, in that there is no crevice to trap and hold food, milk, dirt, germs or other sources of contamination. Public Health authorities are becoming more insistent upon seamless construction and FIBERESIN offers the answer with better appearance and sanitary construction at lower cost.

IDENTICAL SURFACES

The use of physically identical top and bottom surfaces insures a virtually warp-free board and forms an impenetrable barrier against moisture absorption.

NO HIGH SPOTS

There is no possibility for the introduction of glue line irregularities leading to the creation of rapidly wearing "high-spots" in the board.



"ONE PIECE" FROM FACE TO FACE

Because of the interflow of resins under great heat and pressure, we achieve a one piece top with a plastic bond from face to face; thus eliminating the danger of delamination or glue line separation.

A PERFECT SURFACE

Using a grain free core material and highly finished press plates we eliminate the possibility of surface irregularities, the "telegraphing" of grain patterns or other core irregularities. No ripples or shadows mar the appearance of FIBERESIN board stock.

FIBERESIN . . . the tough plastic surface is virtually indestructible. Staining, chipping, cracking, and scratching are practically impossible. No warping, no veneer layers, no metal or wood edges.

FIBERESIN . . . the surface scored A+ in reflectance tests conducted by the University of Wisconsin showing ideal reflectance value of 40-50%.

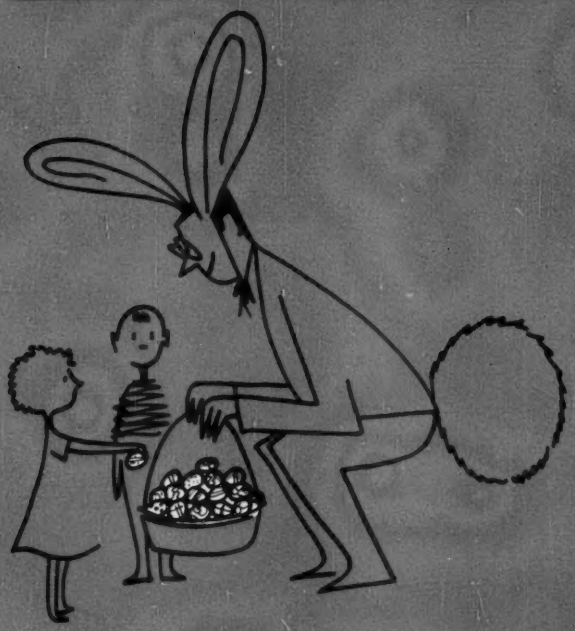
FIBERESIN . . . its maintenance is no problem. Marks and stains are readily removed by wiping with a damp cloth. A FIBERESIN plastic top <u>never</u> needs refinishing.

FIBERESIN is a laminated board having a melamine resin plastic surface on an extremely dense core of wood fiber and phenolic resin. This combination of materials is welded together in hydraulic hot plate presses. The decorative wood grain patterns and colors are an integral part of the surface.

DEVELOPED AND PIONEERED BY

FIBERESIN®
PLASTICS COMPANY
OCONOMOWOC • WISCONSIN

THE NATION'S SCHOOLS



APRIL

Education in 2000 A.D.

Color in the schoolroom

Driver education for every student

Birds and bees of press relations

Naming that new school

Helping the beginning teacher

Secondary school principals meet

Legal requirements for board minutes

School administration—in retrospect

Curriculum controlled planning of junior high

Scholarships for high school graduates

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION